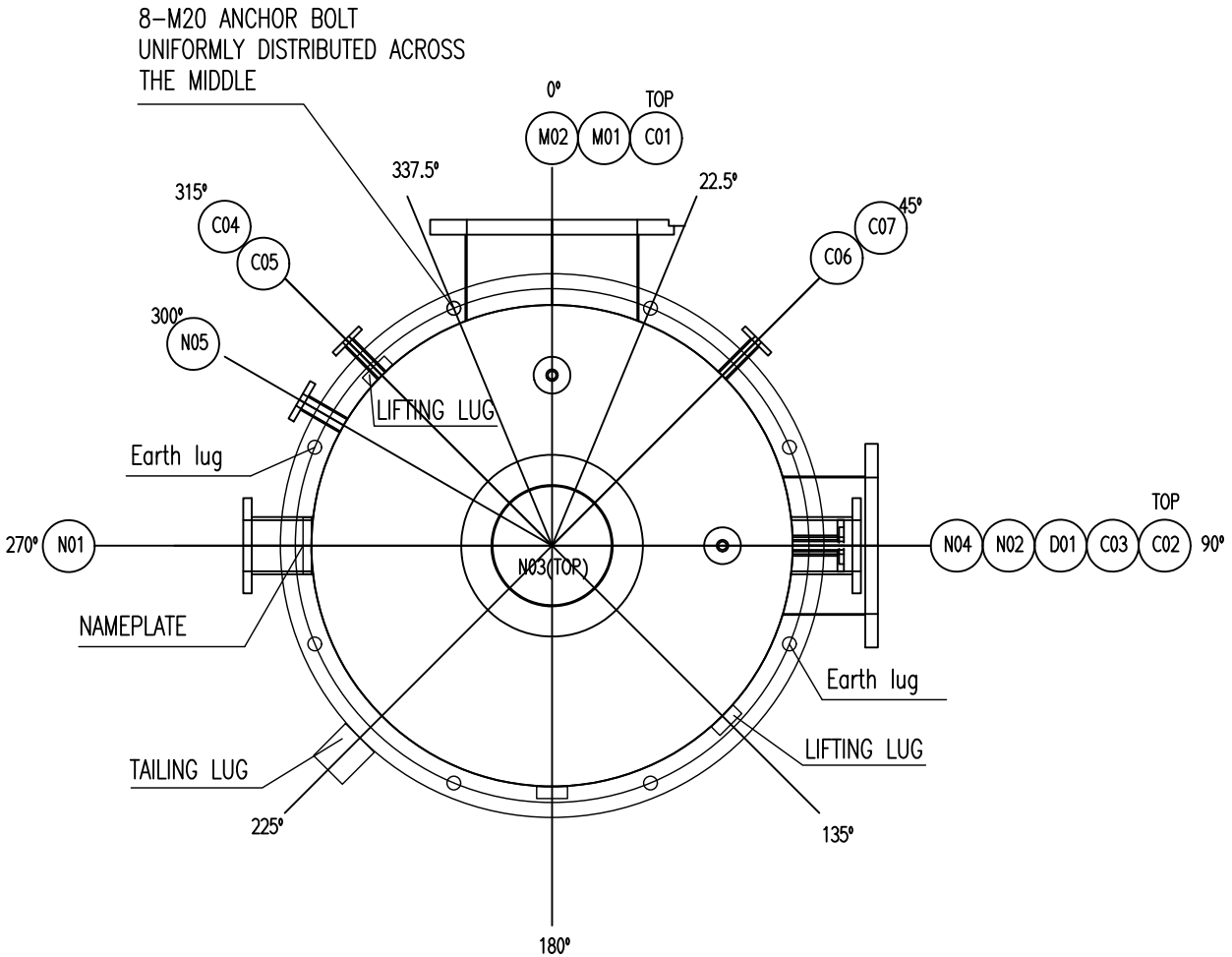
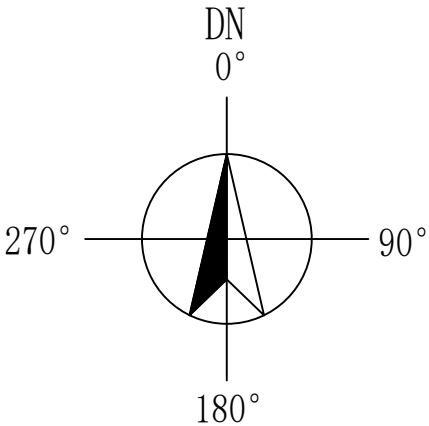


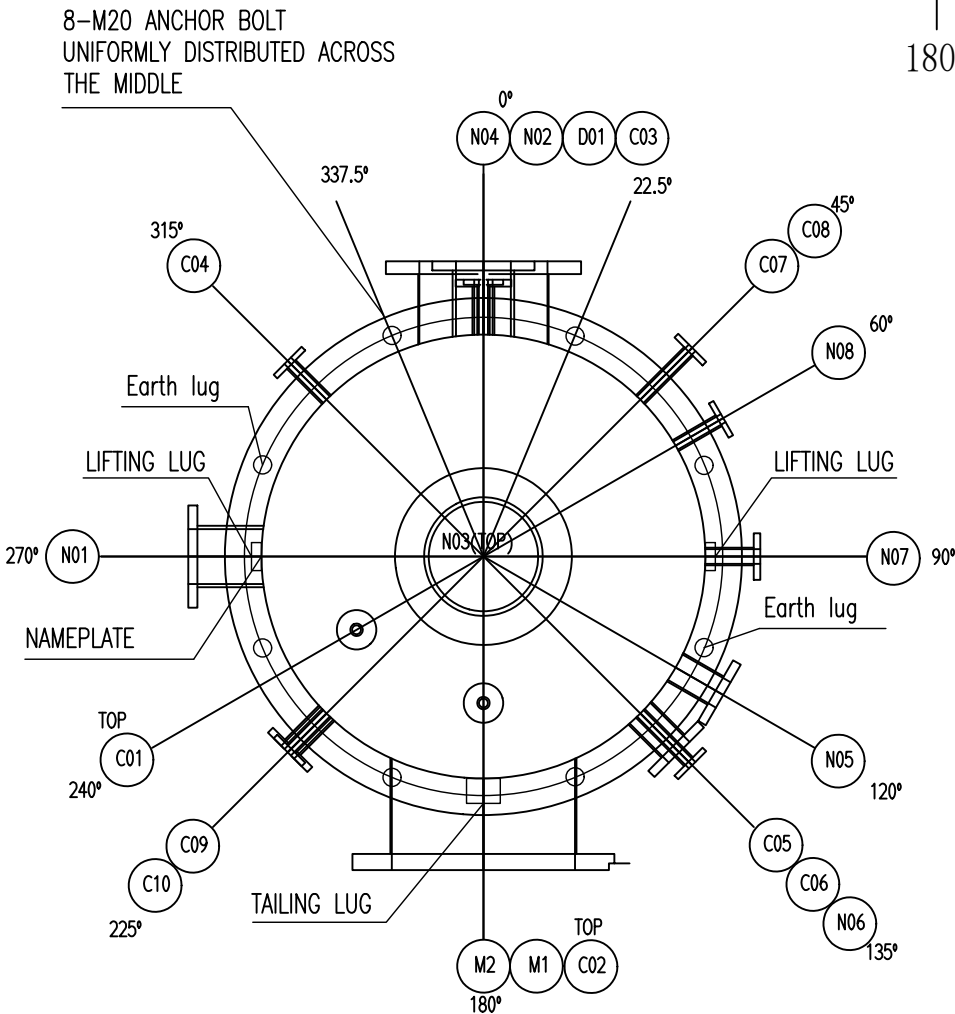
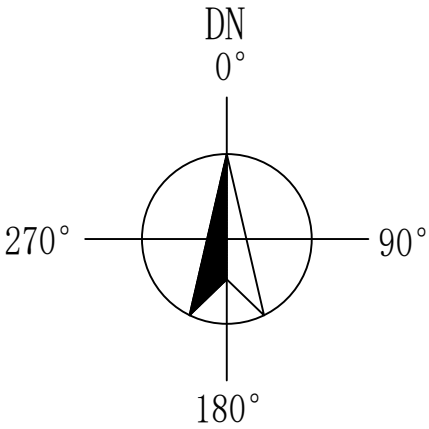




OPENING DIRECTION
M01~M02



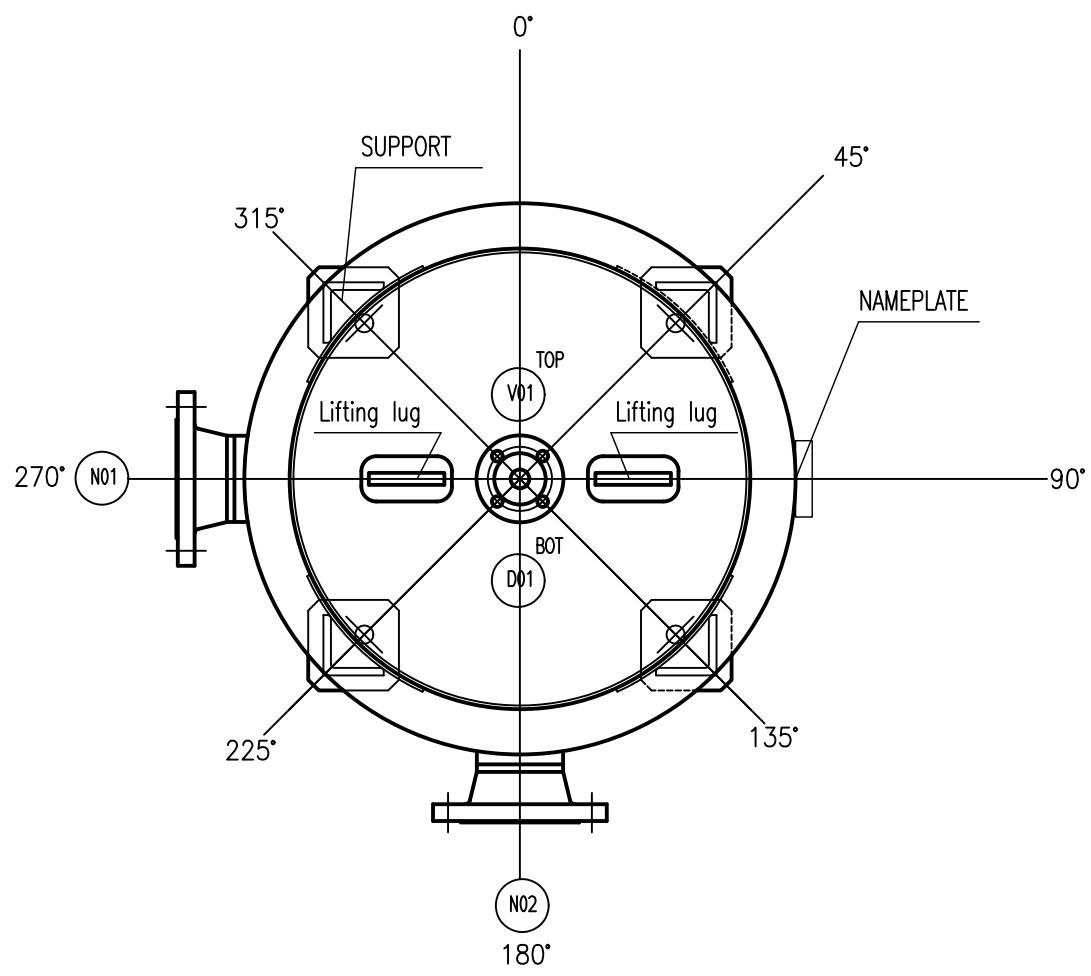
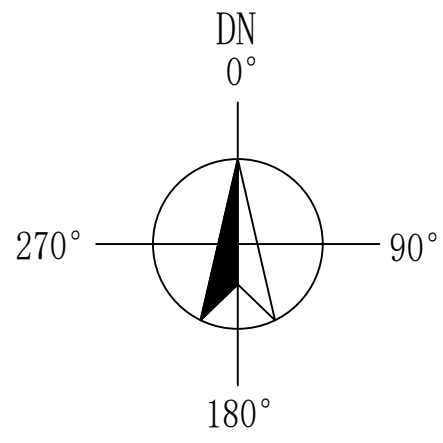
D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD DATE
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div> <div>Nozzle Orientation T-1101 1#ABSORPTION COLUMN</div>				<div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>			
				Neopentyl Glycol Plant			
				DETAIL DESIGN			
				21150-18000-PP60-01			D00
SPECI	PIPING	AREA	18000	SCALE	-		SHT. 1 OF 1



OPENING DIRECTION
M1~M2

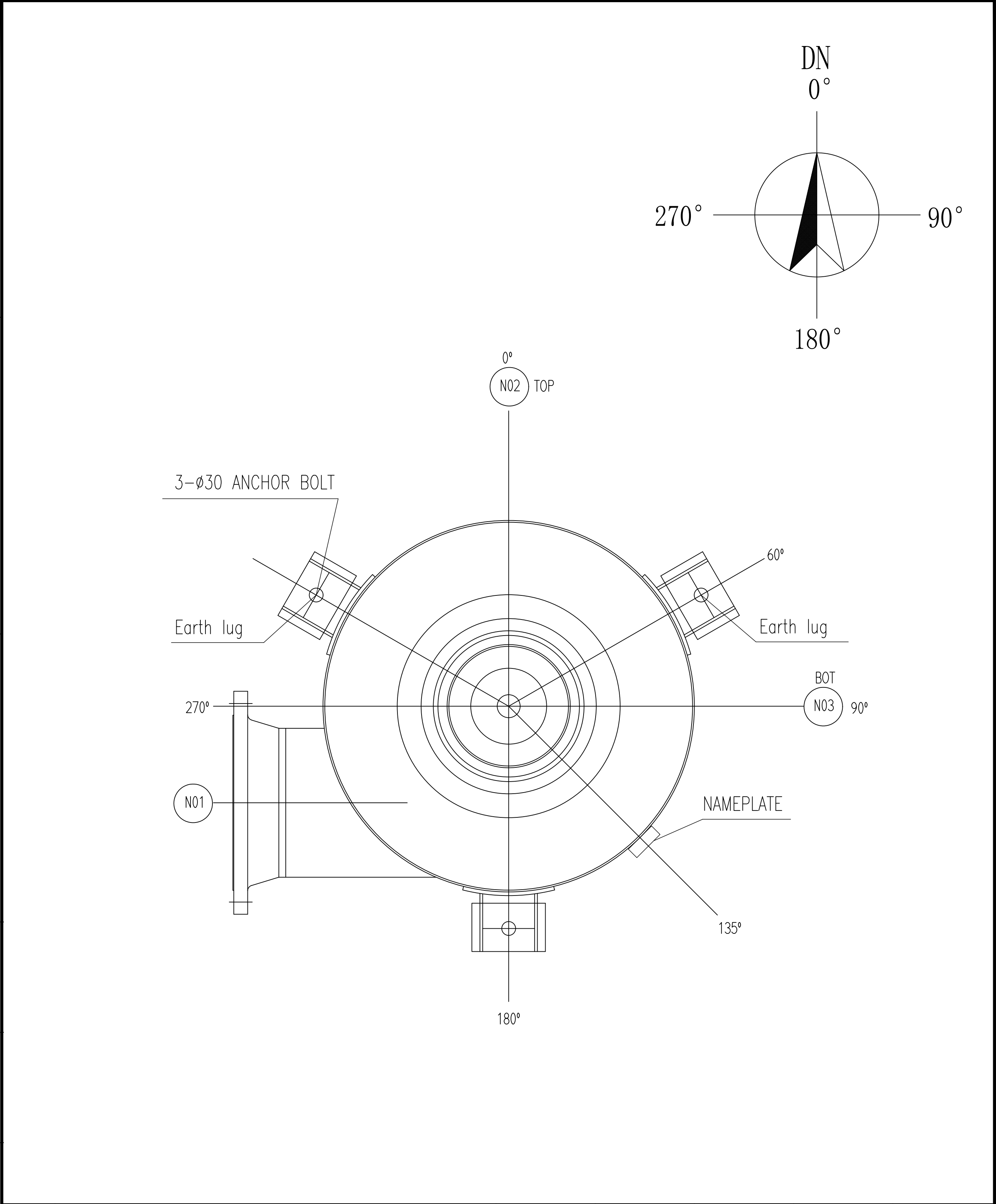




	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation T-1102 2#ABSORPTION COLUMN		Neopentyl Glycol Plant				
			DETAIL DESIGN				
			21150-18000-PP60-02				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

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A4 297×210

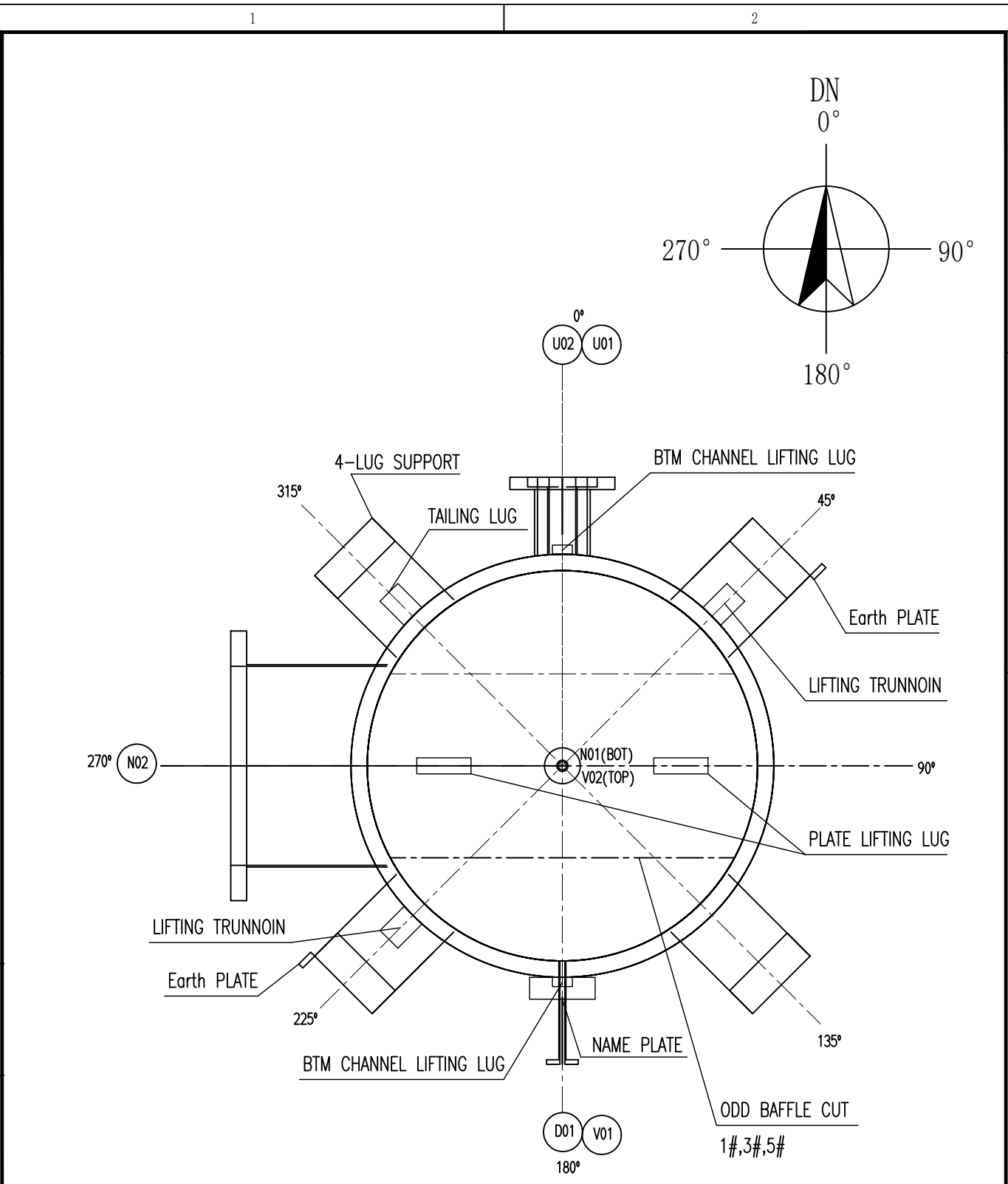


D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10			
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE		
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div> <div>Nozzle Orientation V-1104 STEAM FILTER</div>				<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>						
				Neopentyl Glycol Plant						
				DETAIL DESIGN						
				21150-18000-PP60-03						D00
SPECI	PIPING	AREA	18000	SCALE	-		SHT.	1	OF	1





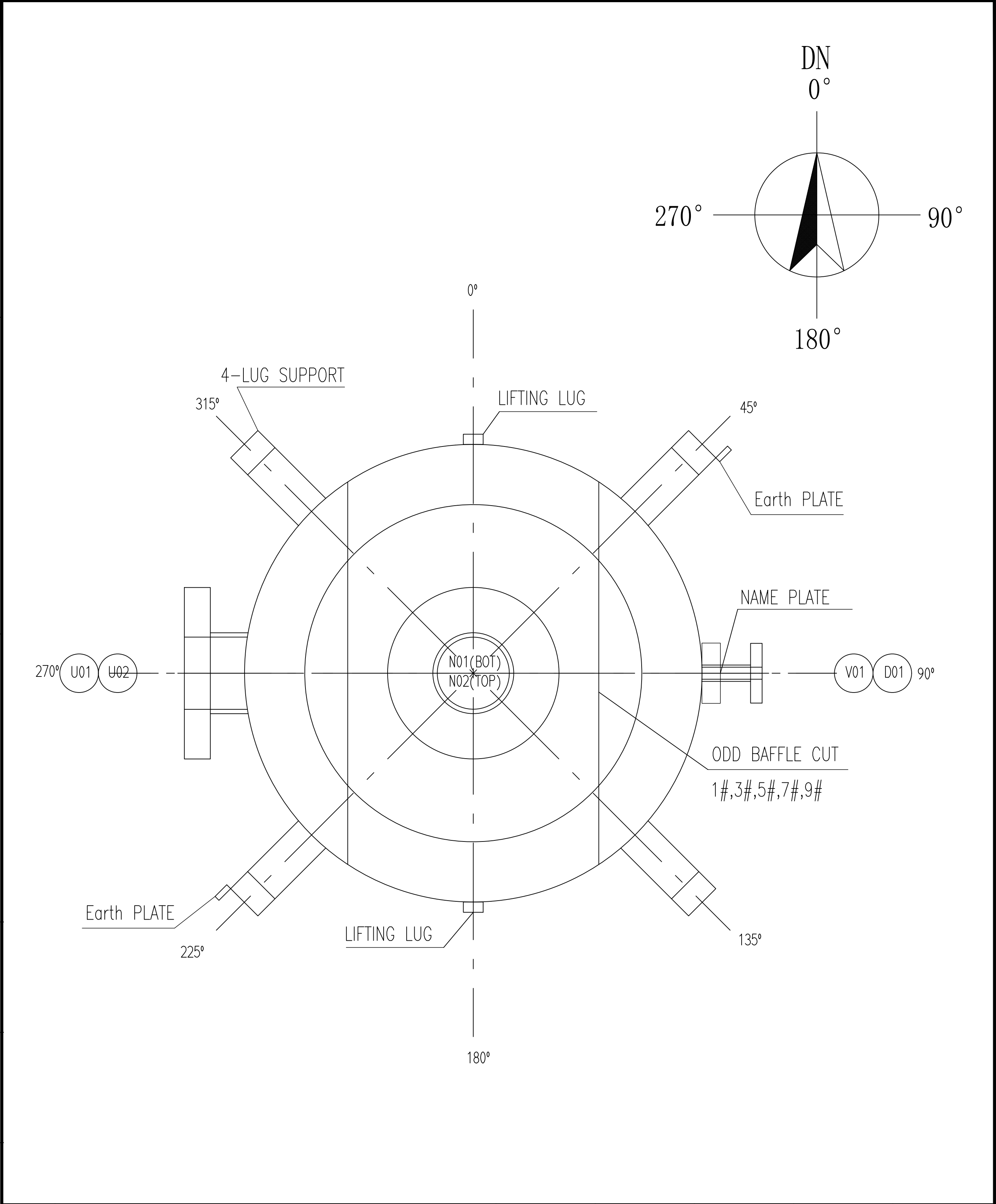
D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div>WUHUAN ENGINEERING CO., LTD.</div> <div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div>			<div>PT PETRO OXO NUSANTARA</div> <div>30,000 TPA NEOPENTYL GLYCOL PALNT</div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-04			D00
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1



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A4 297×210

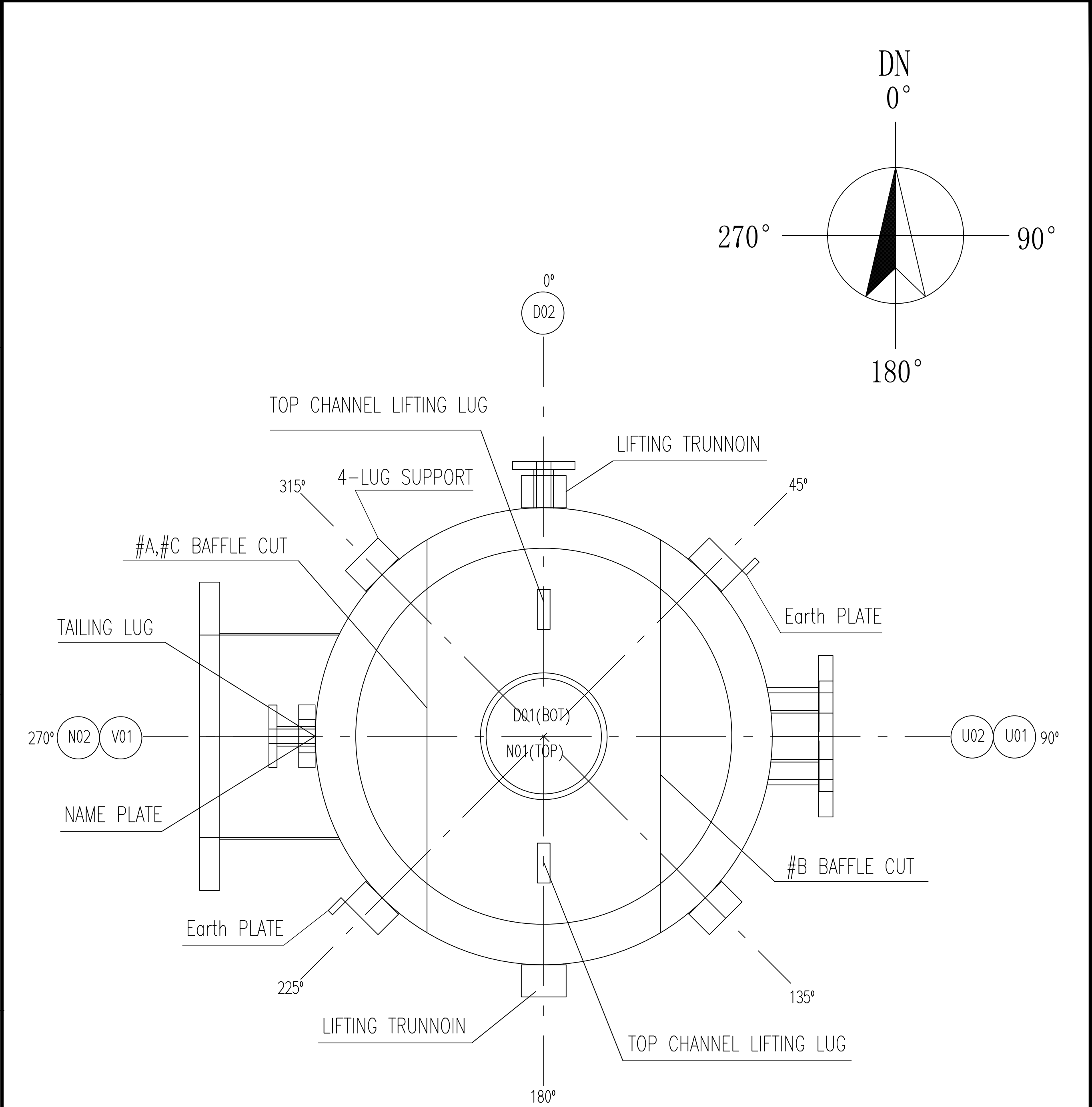


NOTE: I1~2, O1~2 nozzle orientation as per GENERAL ASSEMBLY DWG.

	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation E-2401 LIGHT COMPONENT TOWER REBOILER		Neopentyl Glycol Plant				
			DETAIL DESIGN				
			21150-18000-PP60-05				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1





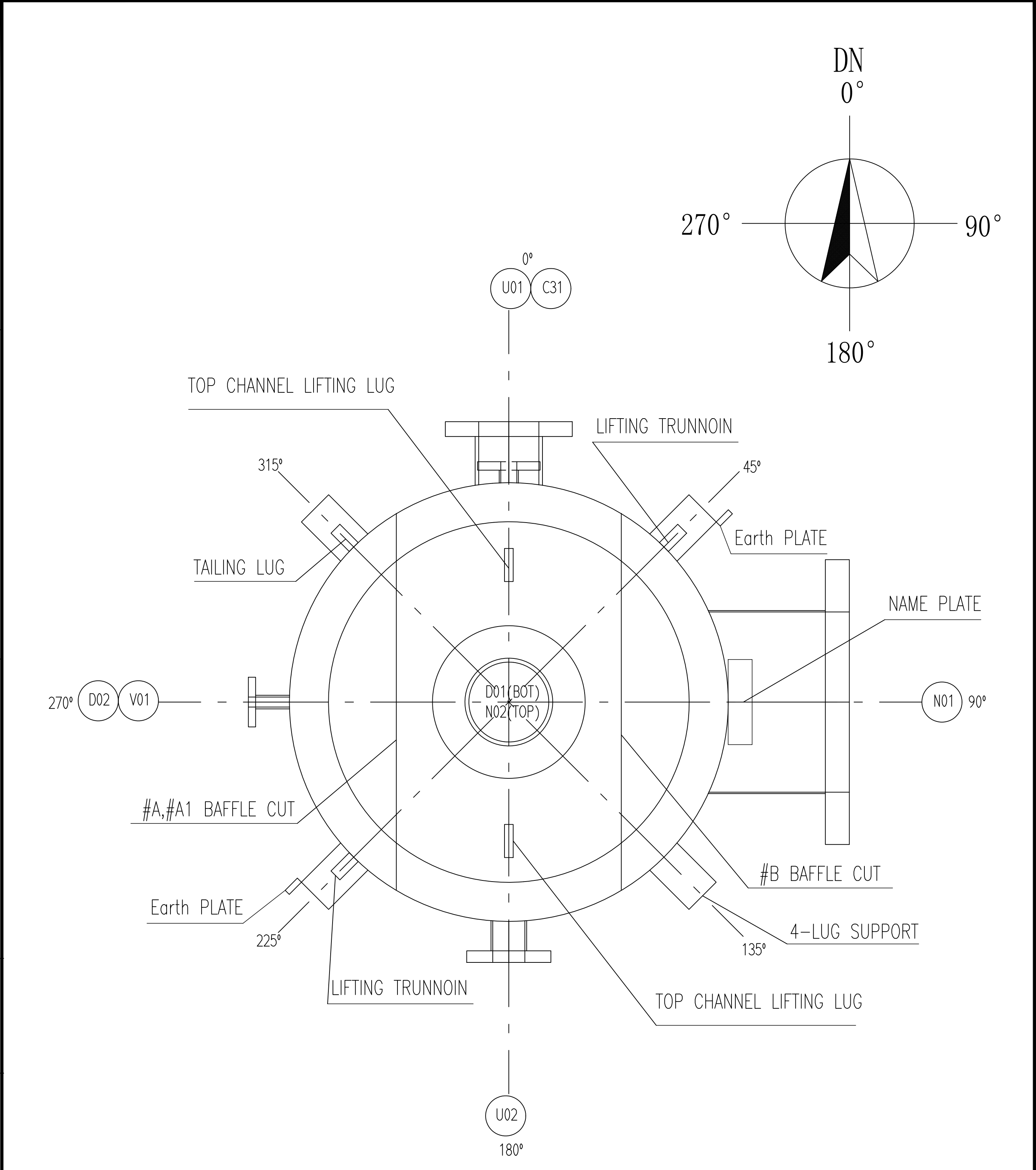
D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div> <div>Nozzle Orientation E-2301 HYDROGENATION HEAT EXCHANGER</div>			<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-06			
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1





NOTE: T01~T06 nozzle orientation as per GENERAL ASSEMBLY DWG.

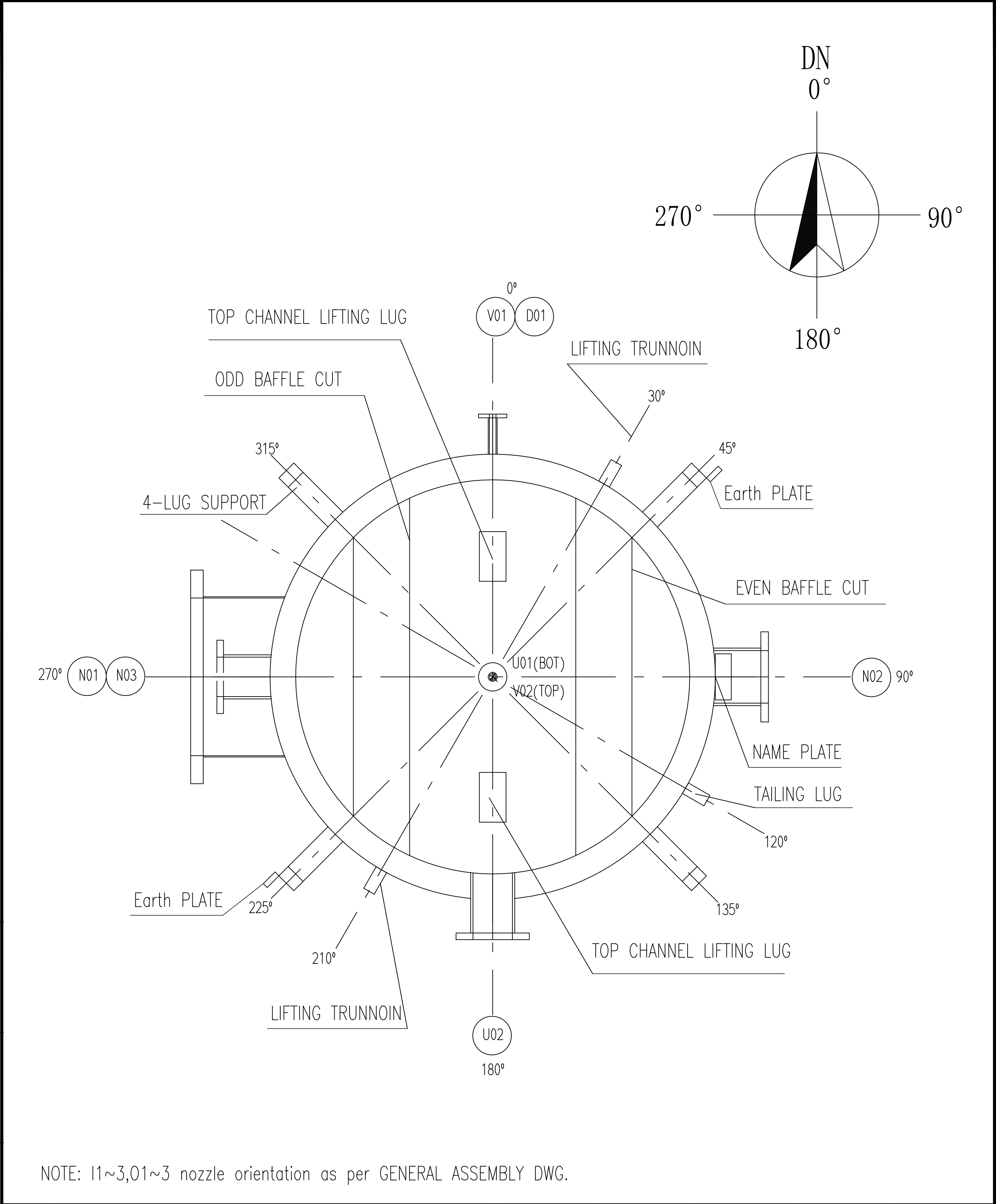
D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE



SPECI	SIGNATURE	<div> WUHUAN ENGINEERING CO., LTD.</div> <div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div>				<div> PT PETRO OXO NUSANTARA</div> <div>30,000 TPA NEOPENTYL GLYCOL PALNT</div>		
		Nozzle Orientation				Neopentyl Glycol Plant		
		E-2201				DETAIL DESIGN		
		ALDEHYDE RECOVERY TOWER REBOILER				21150-18000-PP60-07		D00 REV.
		SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1



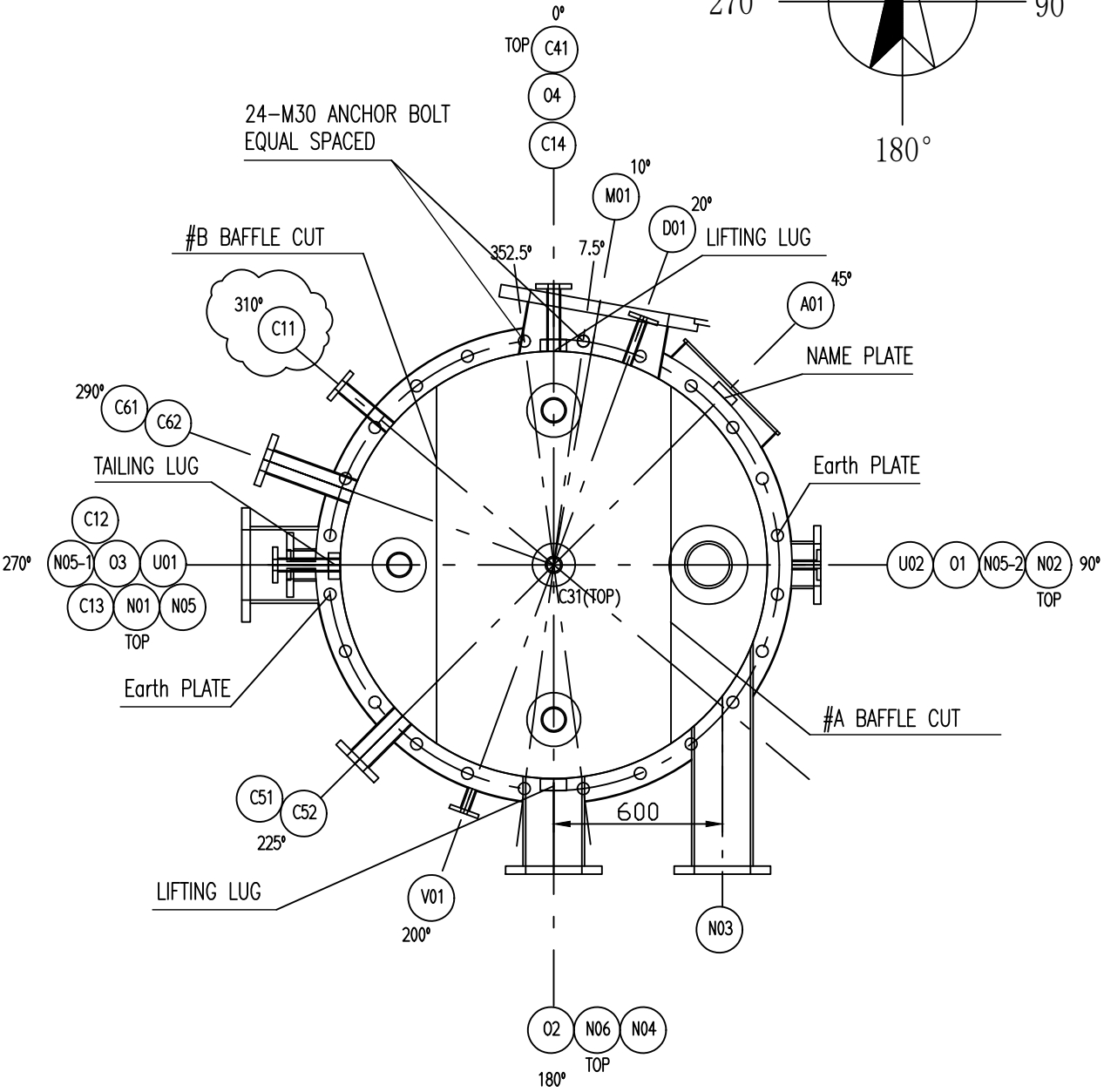
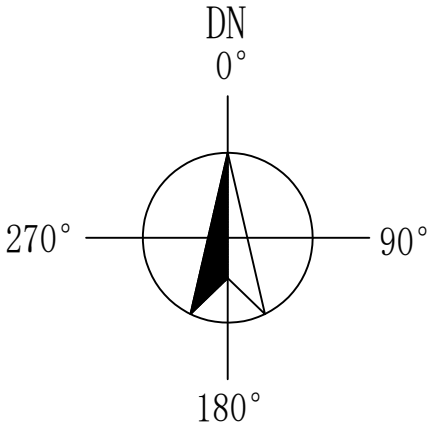
NOTE: H01~H06 nozzle orientation as per GENERAL ASSEMBLY DWG.

D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div>		<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>				
Nozzle Orientation E-2403 NPG TOWER REBOILER		Neopentyl Glycol Plant				
		DETAIL DESIGN				
		21150-18000-PP60-08				D00 REV.
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1



D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div> <div>Nozzle Orientation E-2404 NPG TOWER CONDENSER</div>			<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-09			
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION



NOTE: S1~16, N05-3 nozzle orientation as per GENERAL ASSEMBLY DWG.

D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE



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PT PETRO OXO NUSANTARA
30,000 TPA NEOPENTYL GLYCOL PALNT

Neopentyl Glycol Plant

DETAIL DESIGN

Nozzle Orientation
R-2101A
THE FIRST CONDESATION REACTOR

21150-18000-PP60-10

D00 REV.

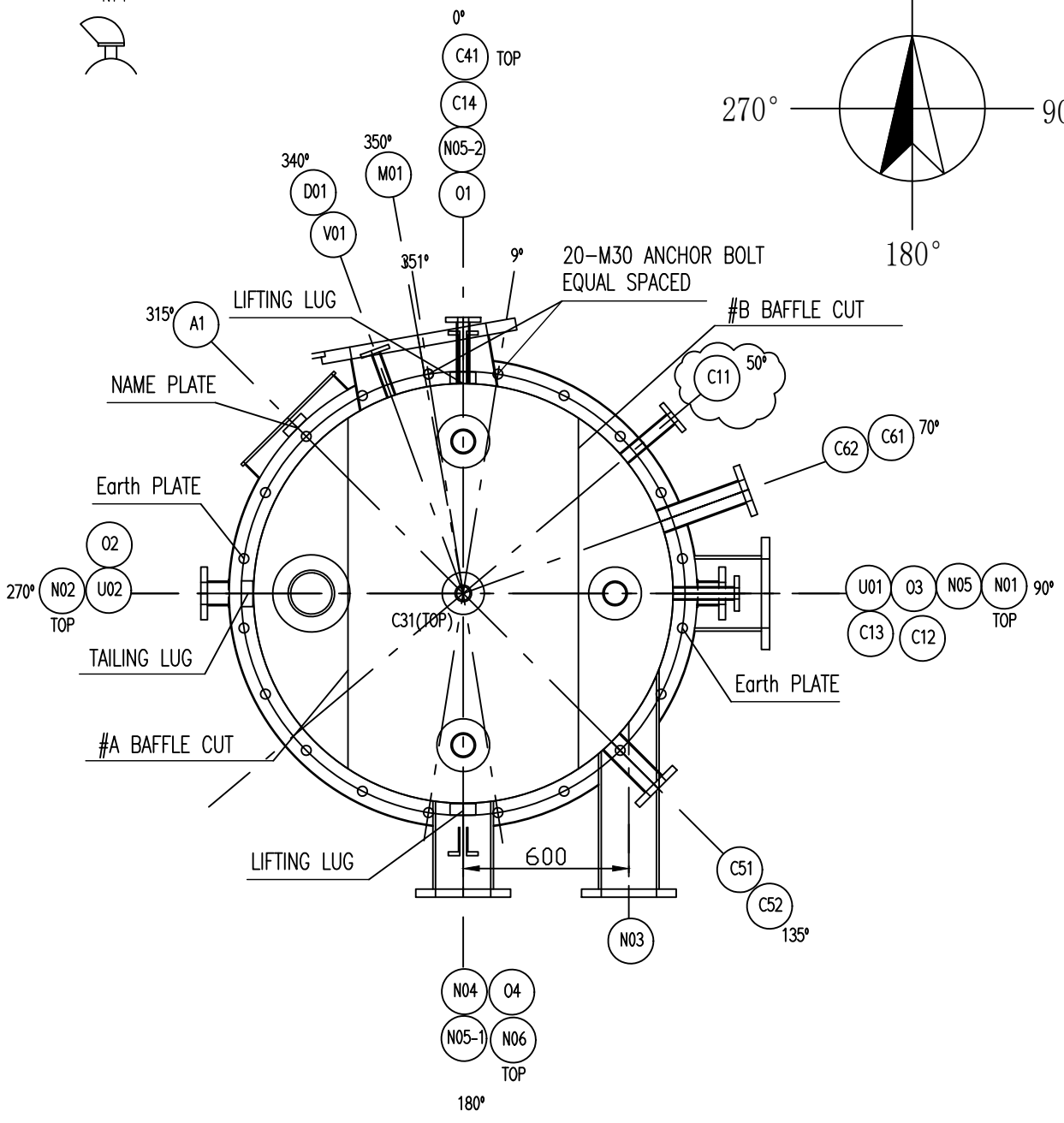
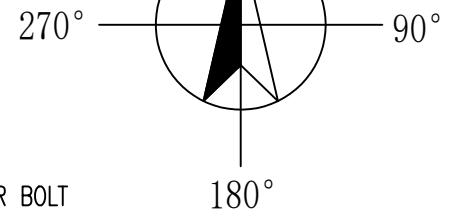
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1	OF	1
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OPENING DIRECTION

M1

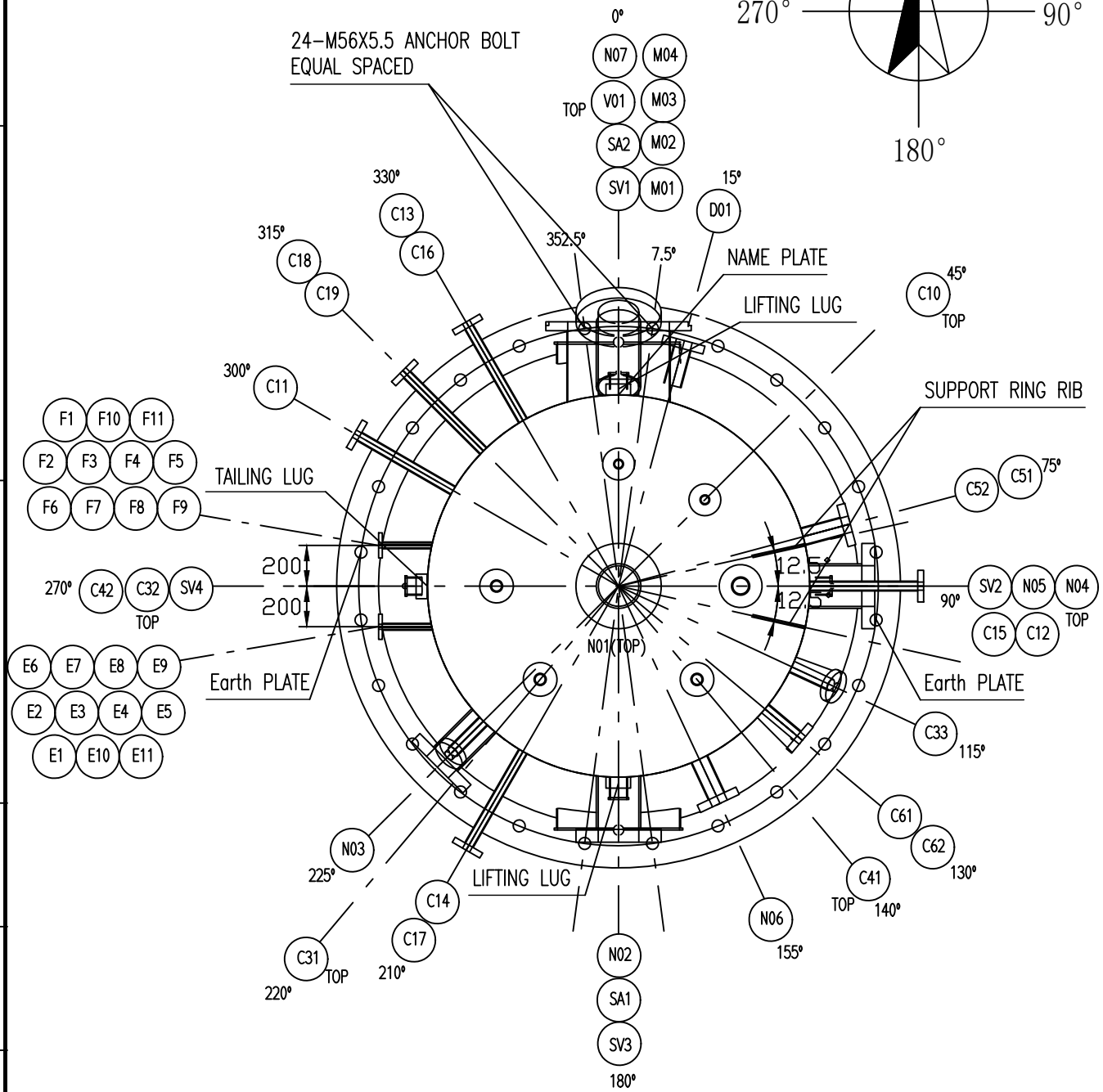
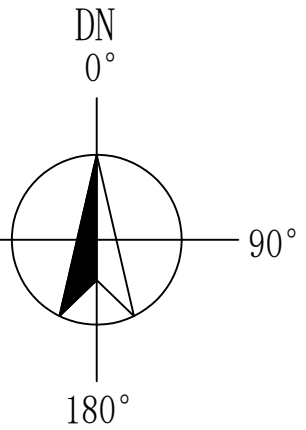




DN
0°



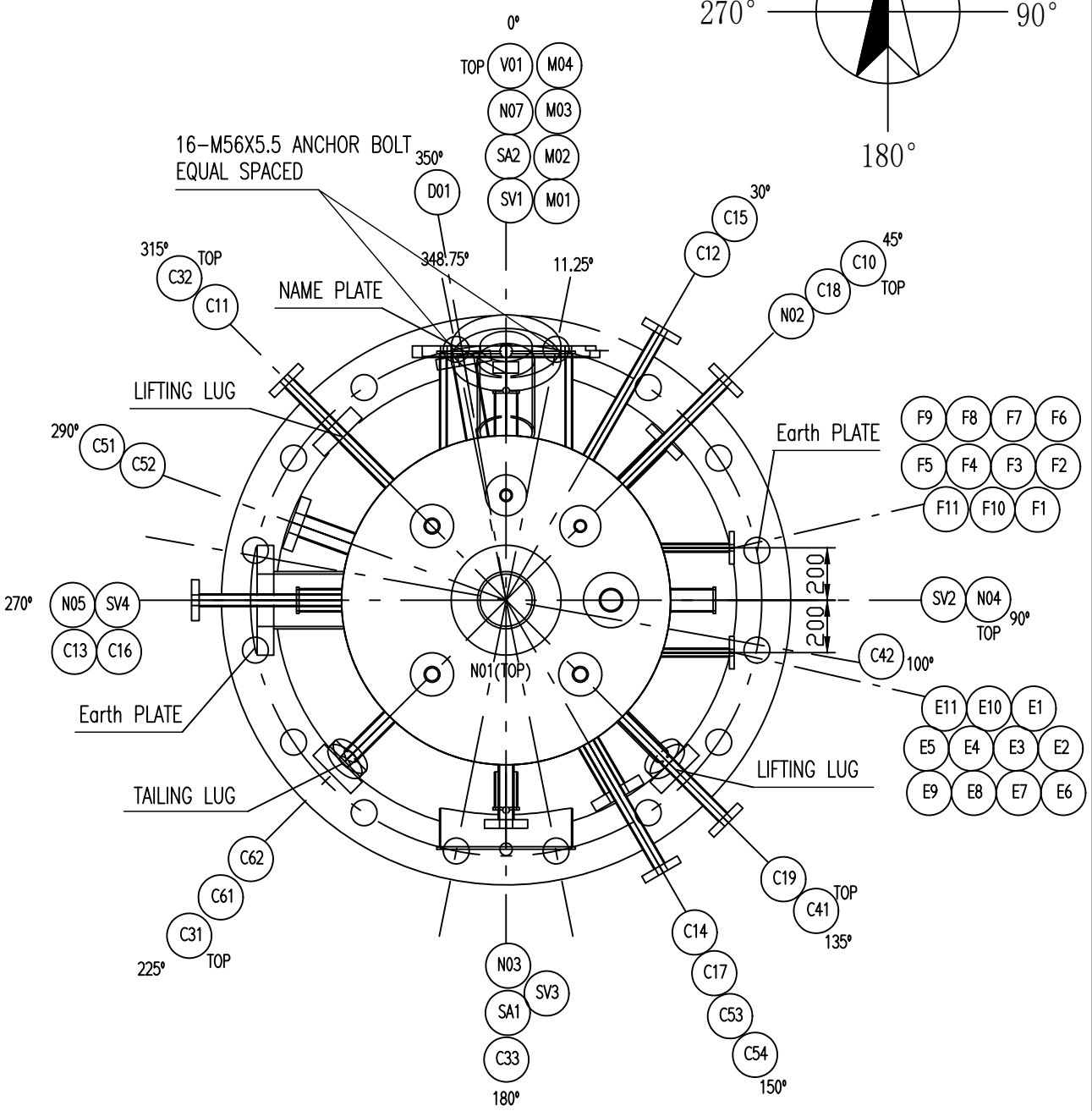
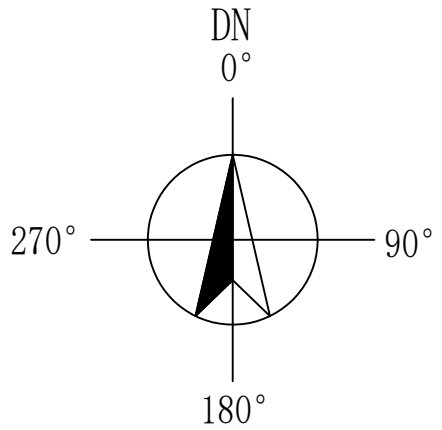
	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI SIGNATURE	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation R-2101B		Neopentyl Glycol Plant				
	THE SECOND CONDESATION REACTOR		DETAIL DESIGN				
			21150-18000-PP60-11				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION
M01~M04



D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div>			<div><div><div>PT PETRO OXO NUSANTARA</div></div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>			
<div>Nozzle Orientation</div> <div>R-2301A</div> <div>THE FIRST HYDROGENATION REACTOR</div>			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-12		D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION
M01~M04



D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE

 MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
Nozzle Orientation R-2301B THE SECOND HYDROGENATION REACTOR		Neopentyl Glycol Plant				
		DETAIL DESIGN				
		21150-18000-PP60-13				D00 REV.
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

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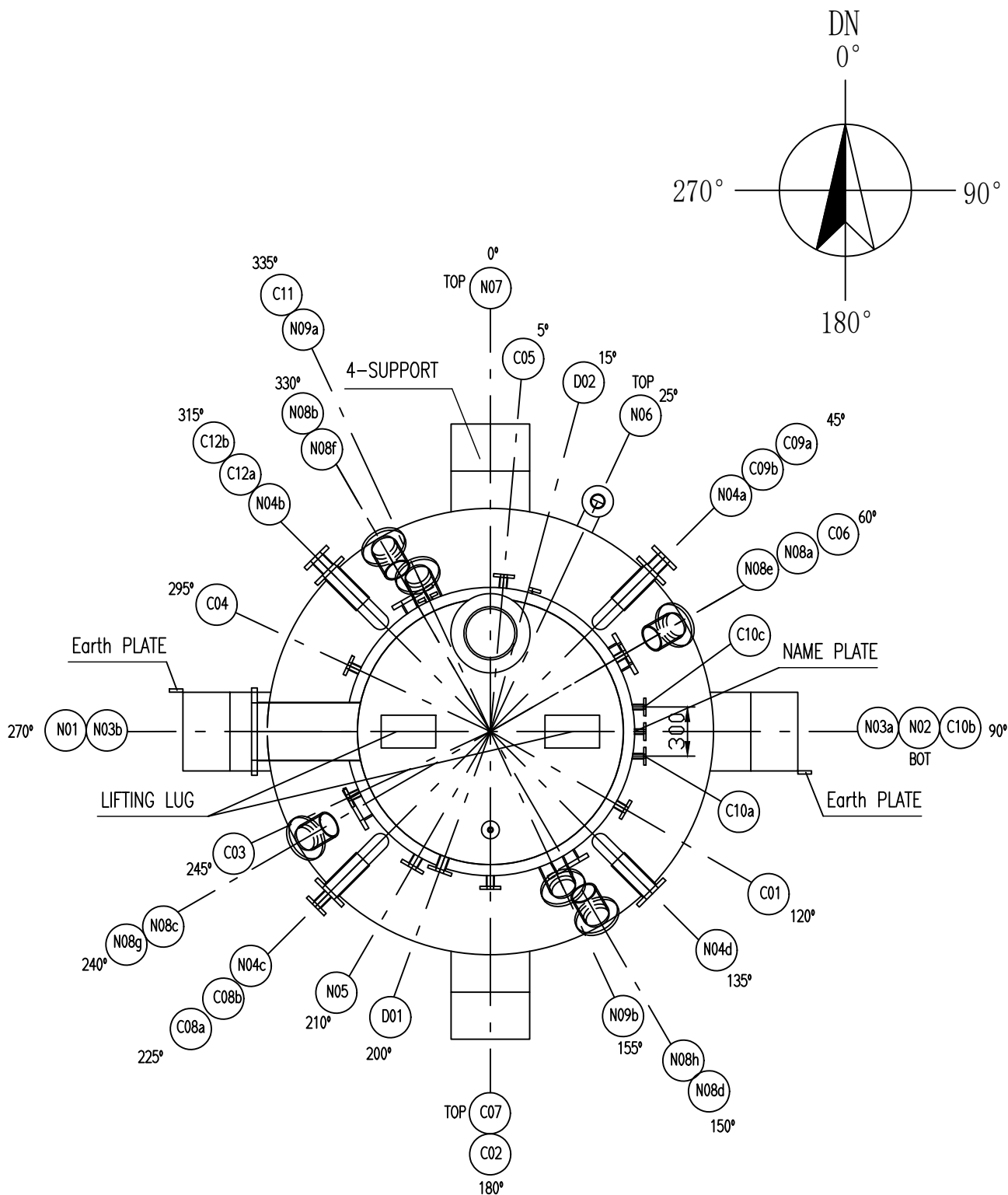
B

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A4 297×210



D00

For Construction

Xiang Guojun

Zheng Kai

Pan Feng

2025.9.10

REV.

DESCRIPTION

DEGND

CHEKD

APPRD

AUTHD

DATE



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PT PETRO OXO NUSANTARA

30,000 TPA NEOPENTYL GLYCOL PALNT

Neopentyl Glycol Plant

DETAIL DESIGN

Nozzle Orientation
R-1101
OXIDATION REACTOR

21150-18000-PP60-14

D00 REV.

SPECI

SIGNATURE

SPECI

PIPING

AREA

18000

SCALE

-

SHT.

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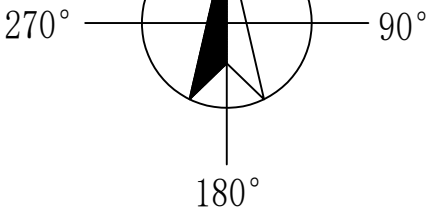
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OPENING DIRECTION

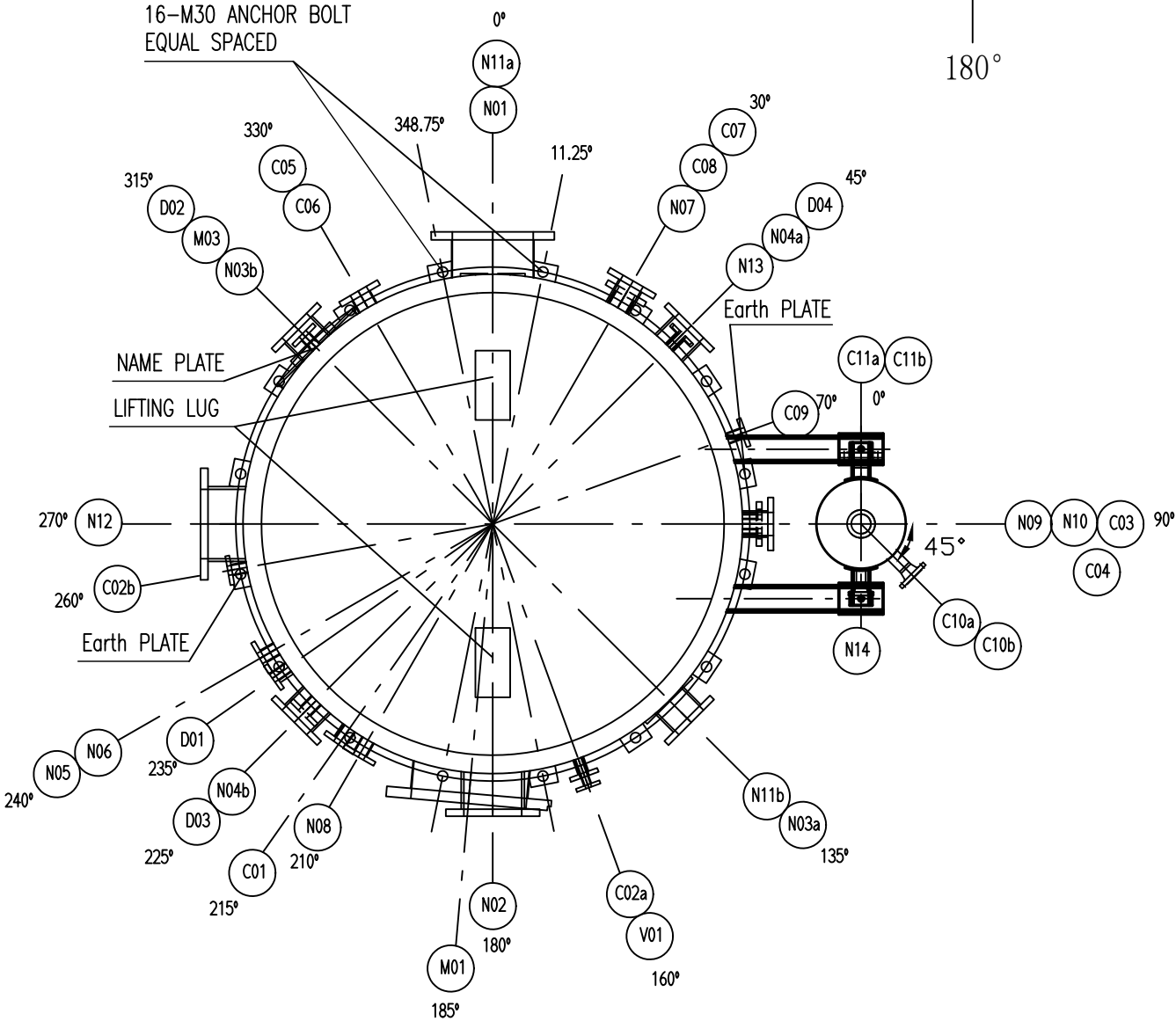
M01





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16-M30 ANCHOR BOLT
EQUAL SPACED



	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation E-1101		Neopentyl Glycol Plant				
	METHANOL EVAPORATOR		DETAIL DESIGN				
			21150-18000-PP60-15				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

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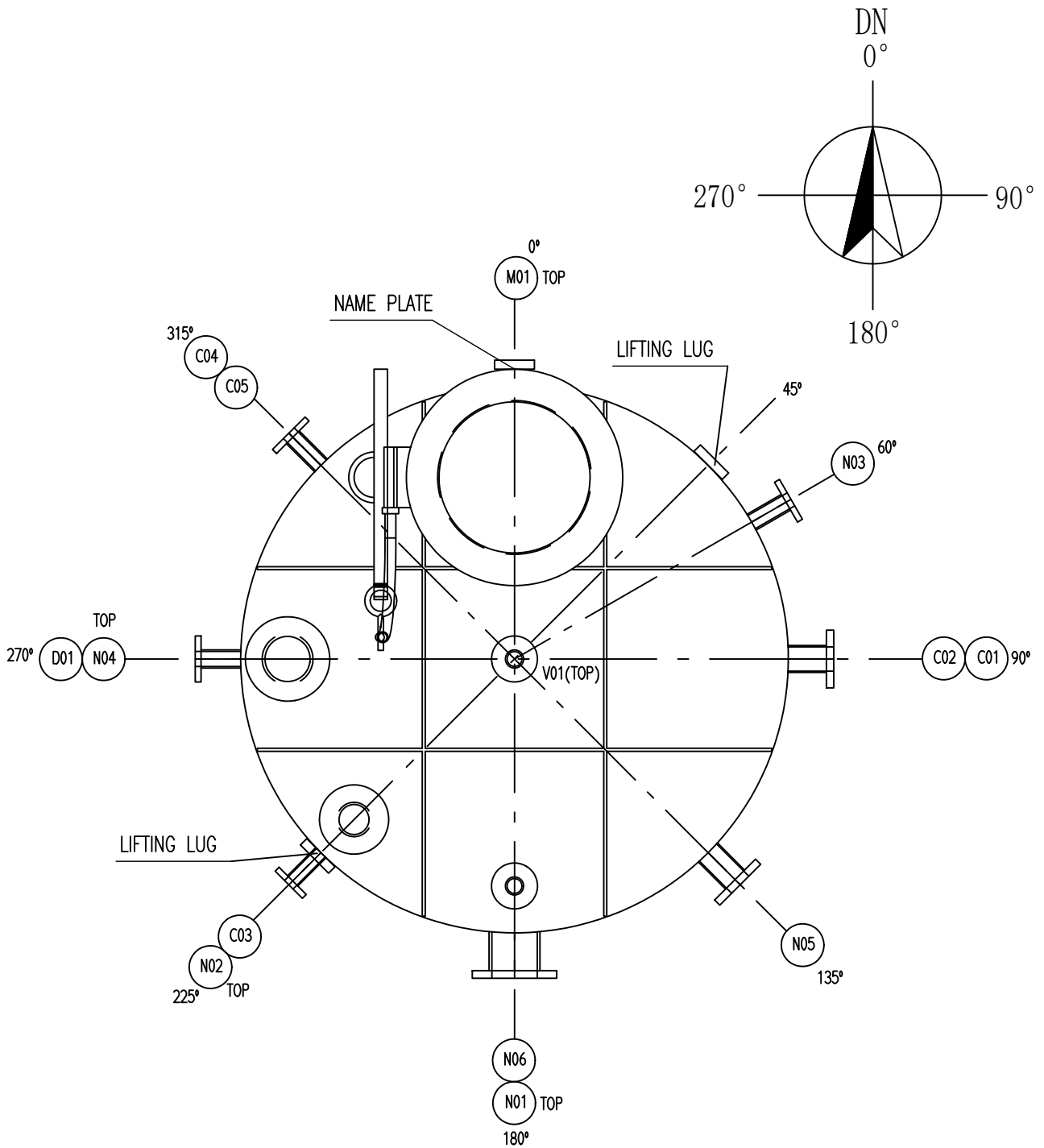
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B

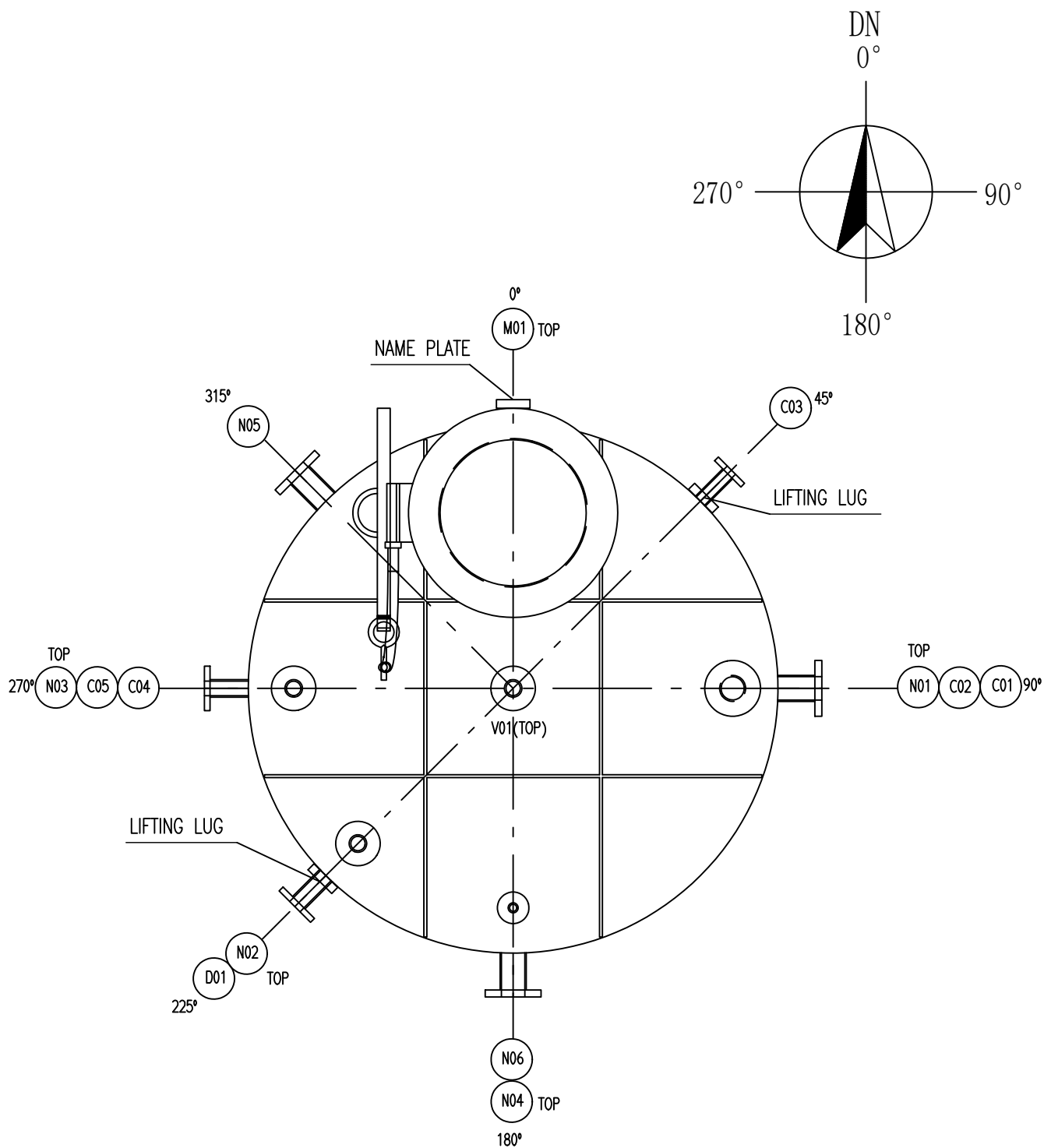
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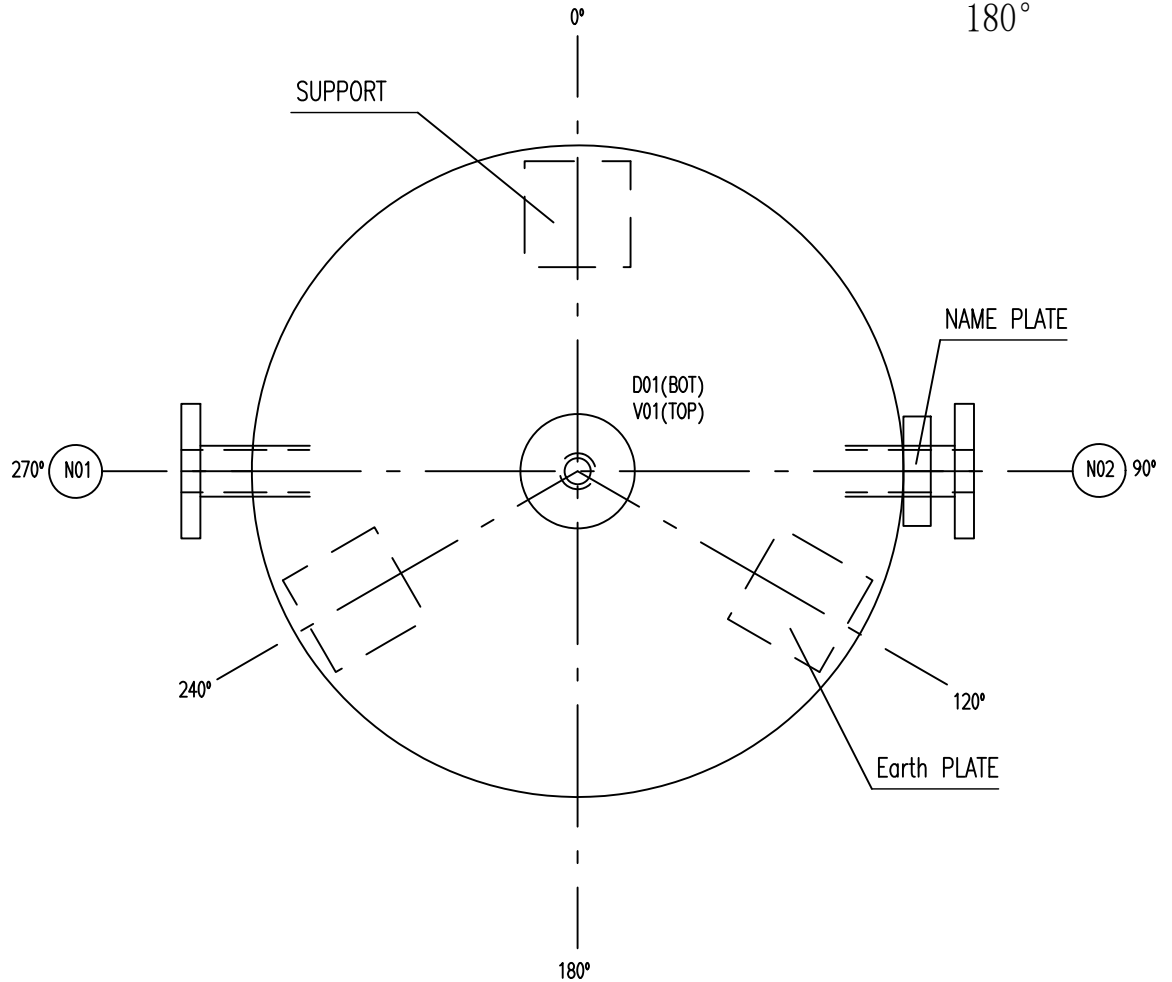
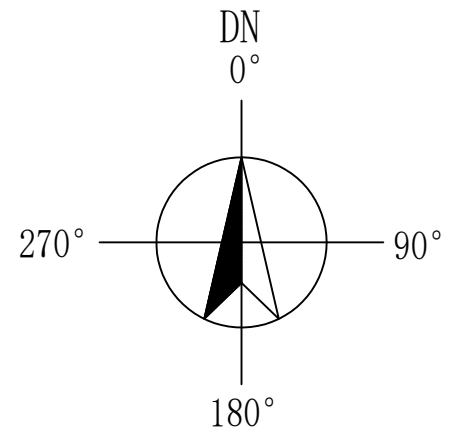
A4 297×210





D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
Nozzle Orientation V-1106A HOT WATER TANK		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-16				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1	OF 1



D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div>			<div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-17			D00
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1



D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE
<div> WUHUAN ENGINEERING CO., LTD.</div> <div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div>				<div> PT PETRO OXO NUSANTARA</div> <div>30,000 TPA NEOPENTYL GLYCOL PALNT</div>				
				Neopentyl Glycol Plant				
				DETAIL DESIGN				
				21150-18000-PP60-18				
SPECI	PIPING	AREA	18000	SCALE	-		SHT. 1	OF 1

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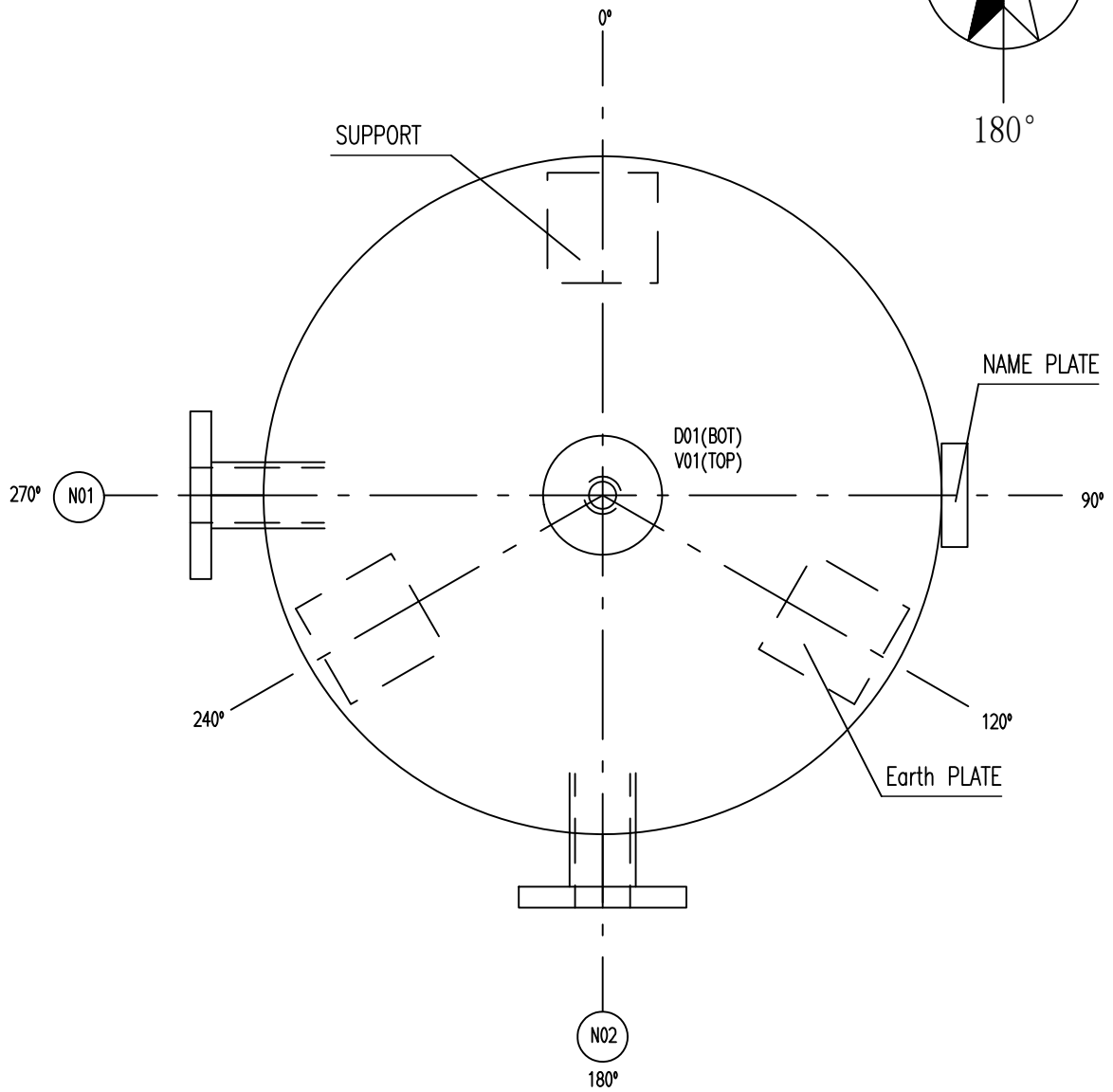
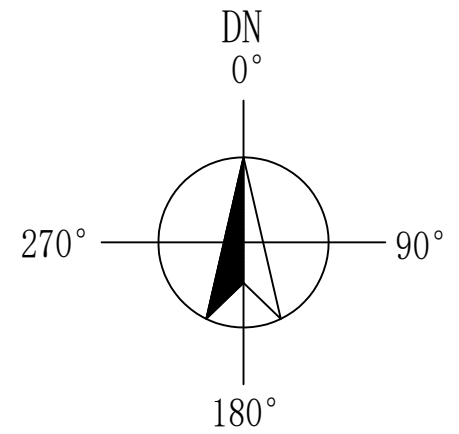
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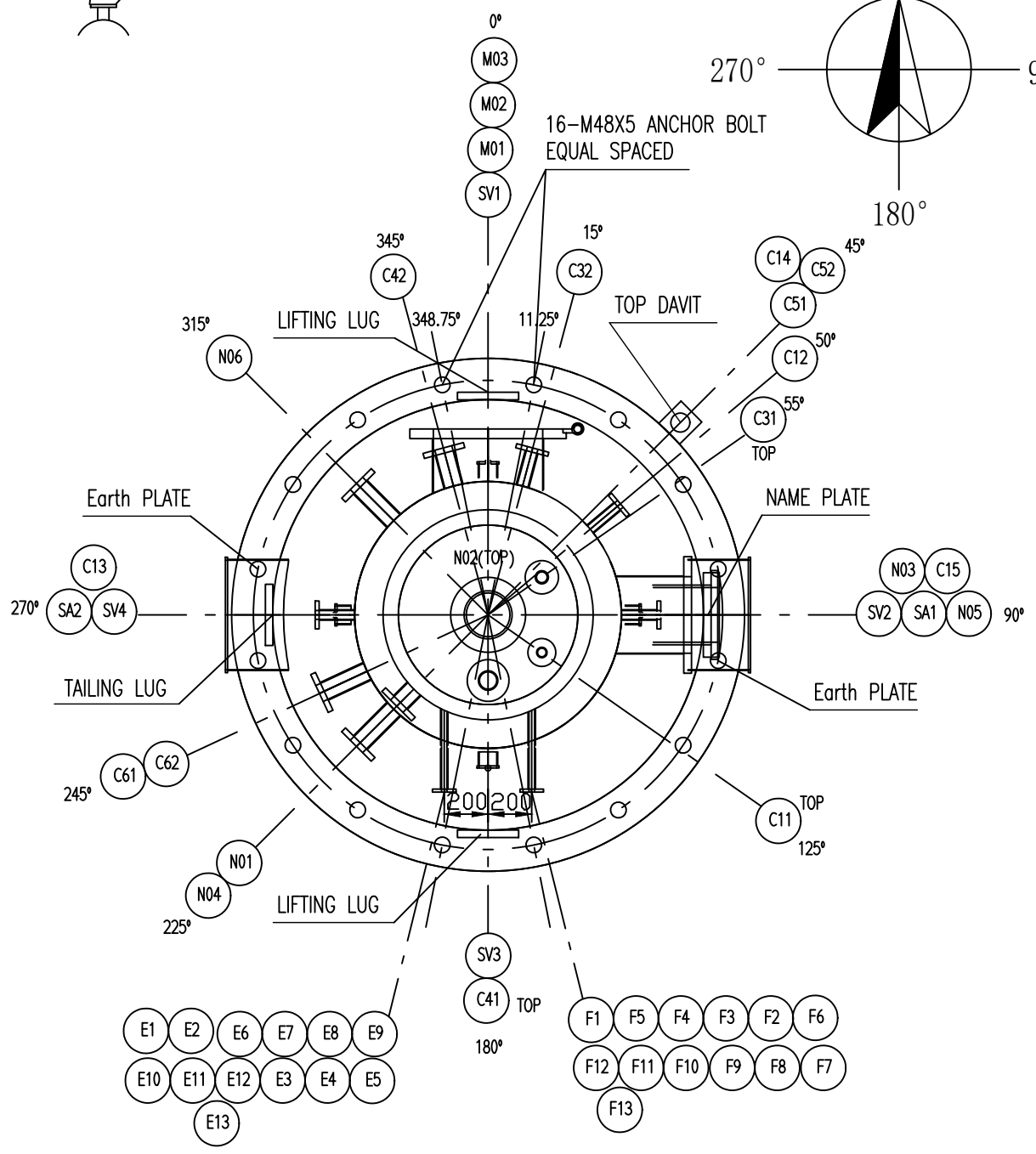
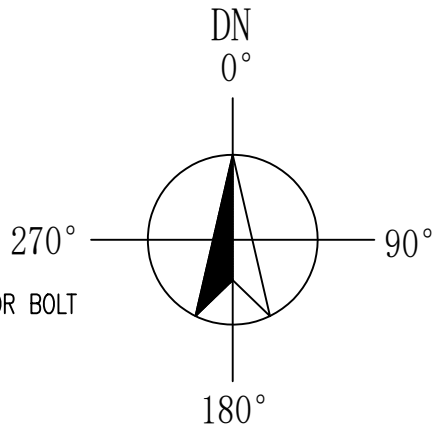
A4 297×210



D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div>				<div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>				
				Neopentyl Glycol Plant				
				DETAIL DESIGN				
				21150-18000-PP60-19				
SPECI	PIPING	AREA	18000	SCALE	-		SHT. 1	OF 1

SIGNATURE


OPENING DIRECTION
M01~M03



NOTE: I1~9, O1~9 nozzle orientation as per GENERAL ASSEMBLY DWG.

D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE

**WUHUAN ENGINEERING CO., LTD.**
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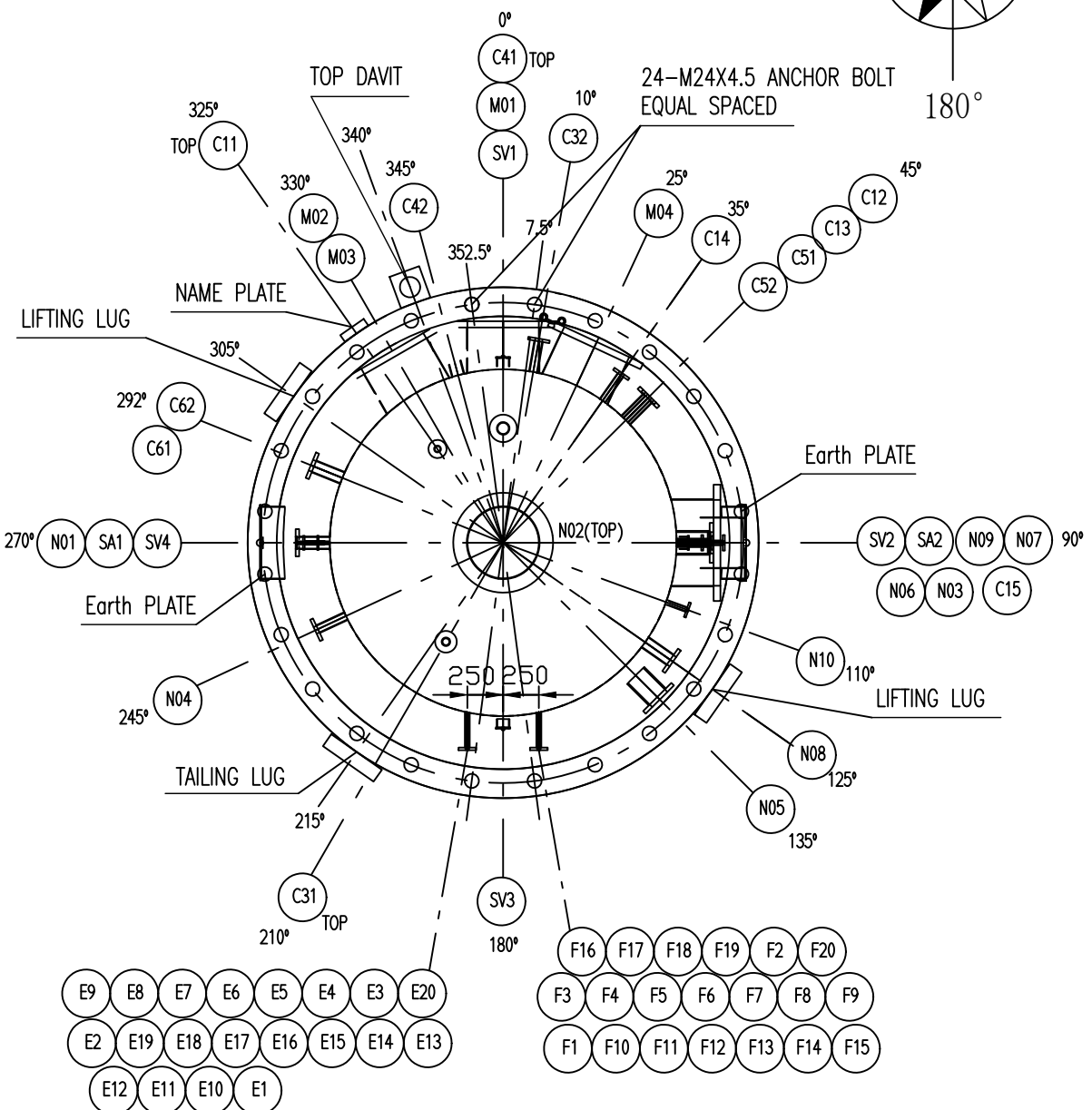
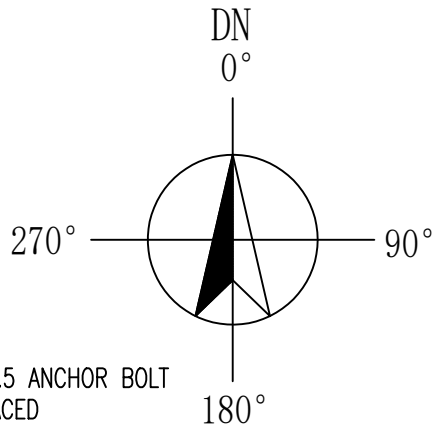
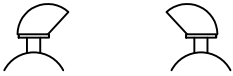
**PT PETRO OXO NUSANTARA**
30,000 TPA NEOPENTYL GLYCOL PALNT

Nozzle Orientation T-2201 Aldehyde recovery tower				Neopentyl Glycol Plant		
				DETAIL DESIGN		
				21150-18000-PP60-20		D00 REV.
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1



SPECI
SIGNATURE

OPENING DIRECTION

M01~M03 M04



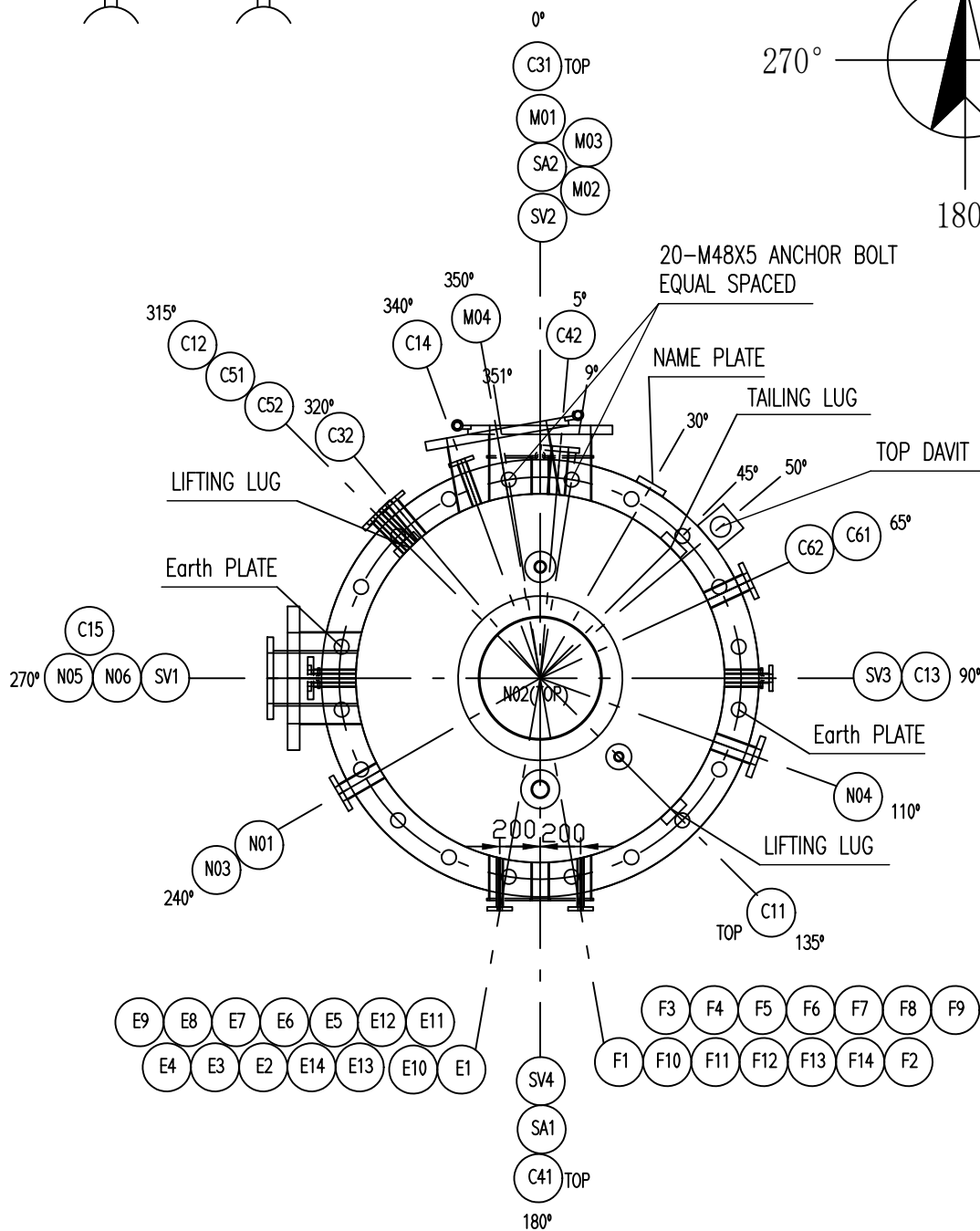
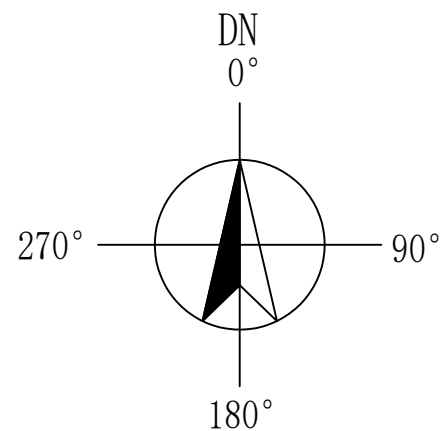
NOTE: I1~12, O1~12 nozzle orientation as per GENERAL ASSEMBLY DWG.

D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10		
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD DATE		
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div>				<div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>					
								Neopentyl Glycol Plant	
				DETAIL DESIGN					
				21150-18000-PP60-21				D00 REV.	
				SPECI	PIPING	AREA	18000	SCALE	-

OPENING DIRECTION

M01~M03

M04



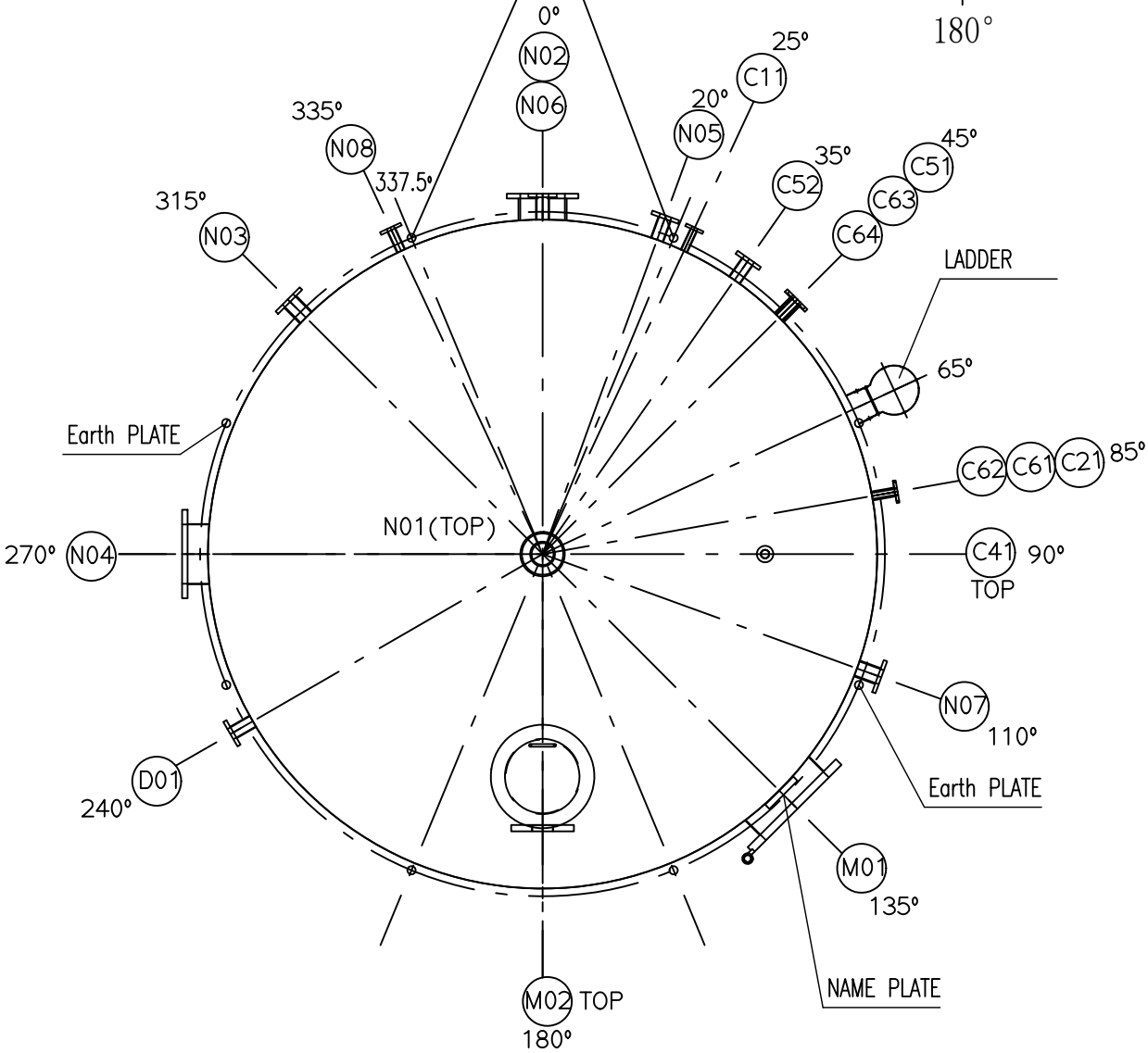
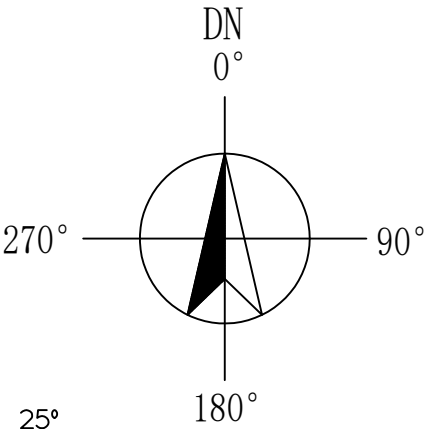
NOTE: I1~10, O1~10 nozzle orientation as per GENERAL ASSEMBLY DWG.



D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.5.22
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
		Neopentyl Glycol Plant					
		DETAIL DESIGN					
Nozzle Orientation T-2402 NPG TOWER		21150-18000-PP60-22					D00 REV.
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1 OF 1

OPENING DIRECTION



8-M30 ANCHOR BOLT
EQUAL SPACED



	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation V-2603 HOT WATER TANK		Neopentyl Glycol Plant				
			DETAIL DESIGN				
			21150-18000-PP60-23				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

A

A

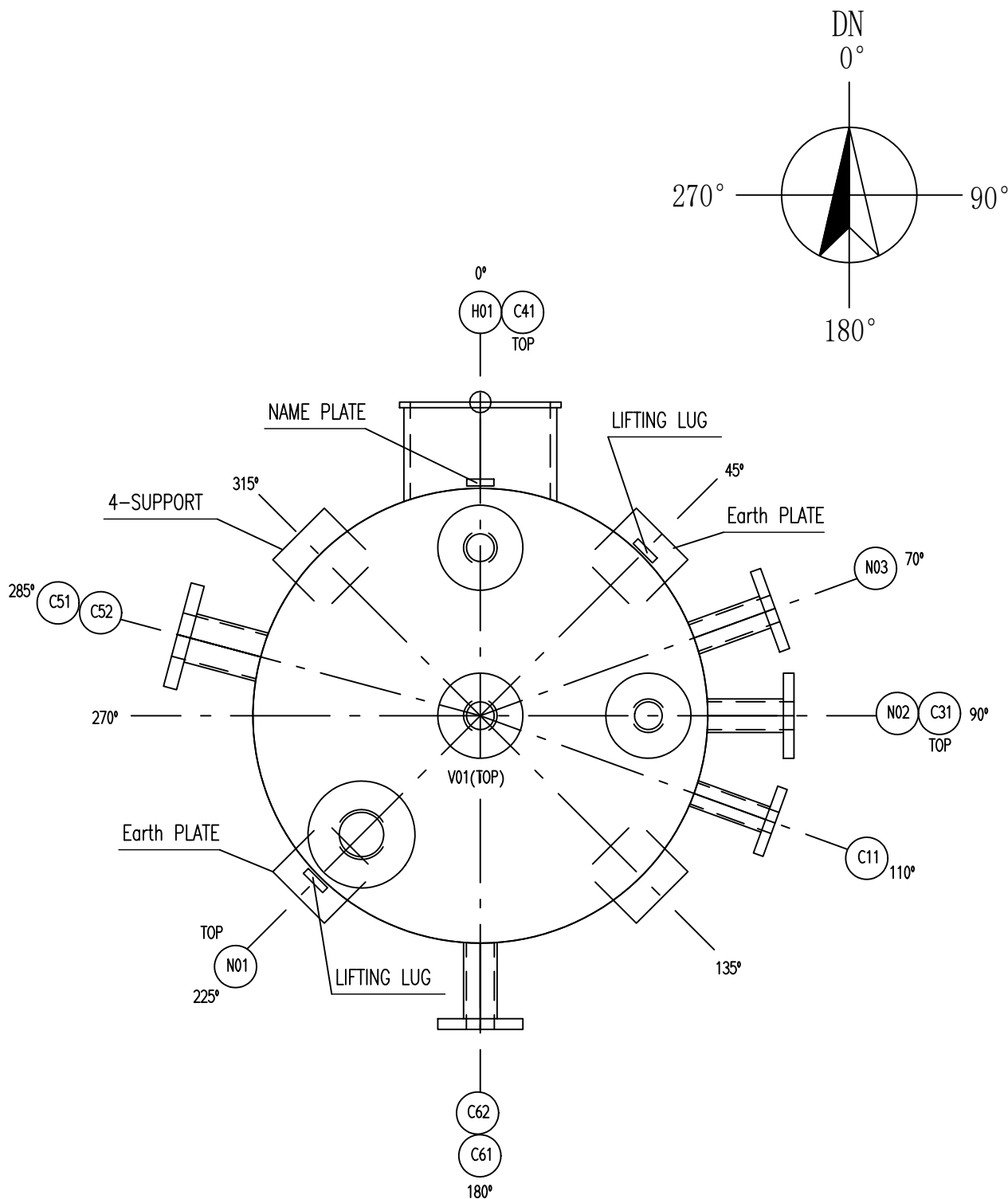
B

B

C

C

A4 297×210



D00

For Construction

Xiang Guojun

Zheng Kai

Pan Feng

2025.9.10

REV.

DESCRIPTION

DEGND

CHEKD

APPRD

AUTHD

DATE



WUHUAN ENGINEERING CO., LTD.

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PT PETRO OXO NUSANTARA

30,000 TPA NEOPENTYL GLYCOL PALNT

Neopentyl Glycol Plant

DETAIL DESIGN

Nozzle Orientation

V-2201

ALDEHYDE RECOVERY TOWER REFLUX TANK

21150-18000-PP60-24

D00 REV.

SPECI

PIPING

AREA

18000

SCALE

-

SHT.

1

OF

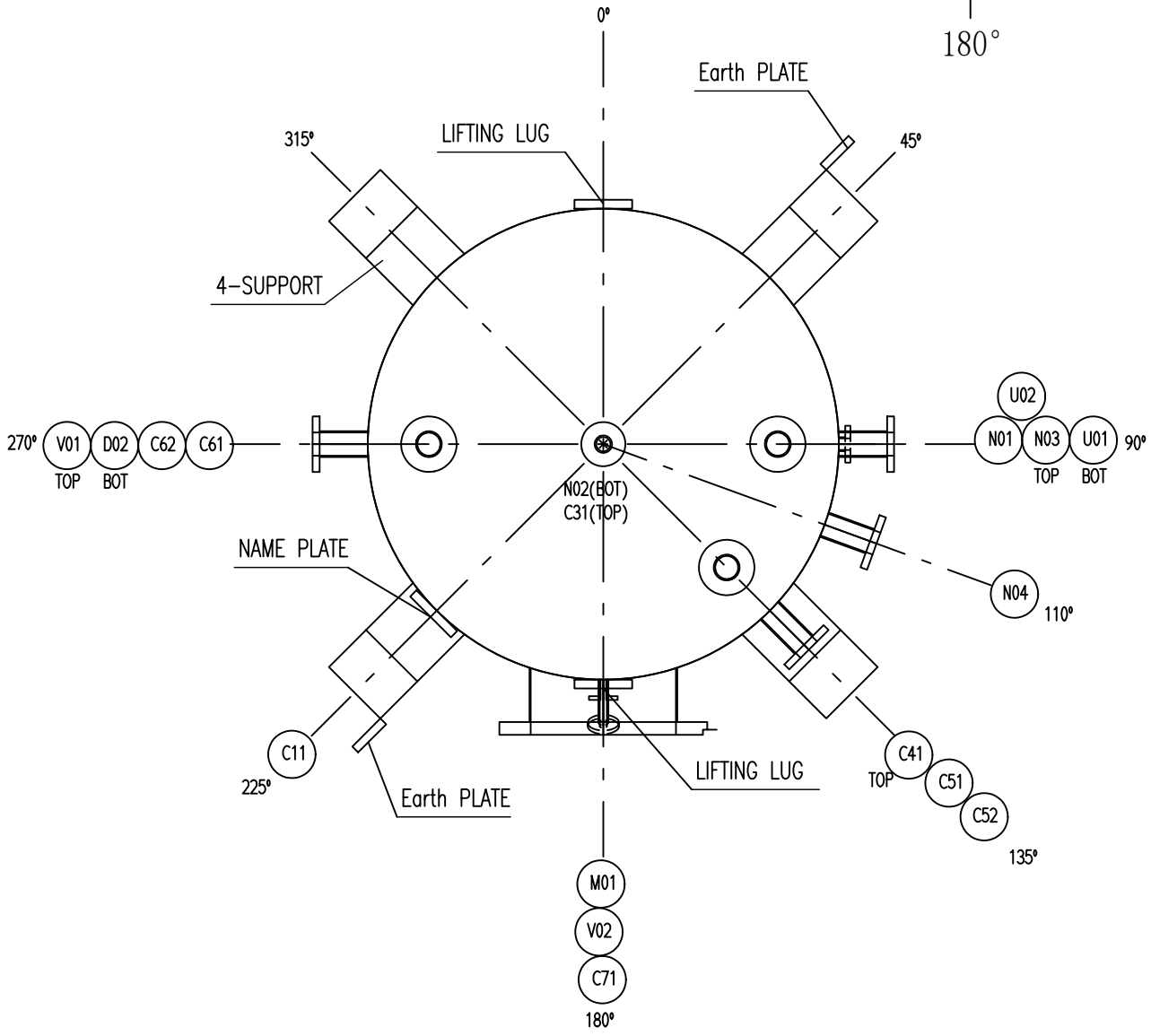
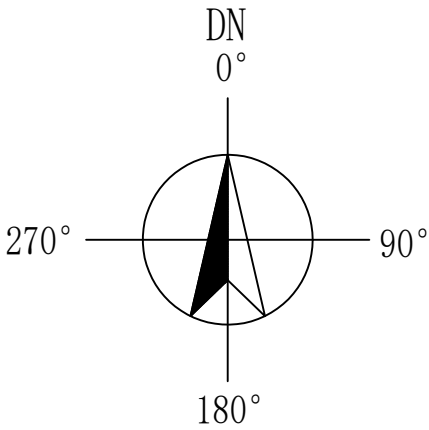
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SPECI

SIGNATURE

OPENING DIRECTION

M01

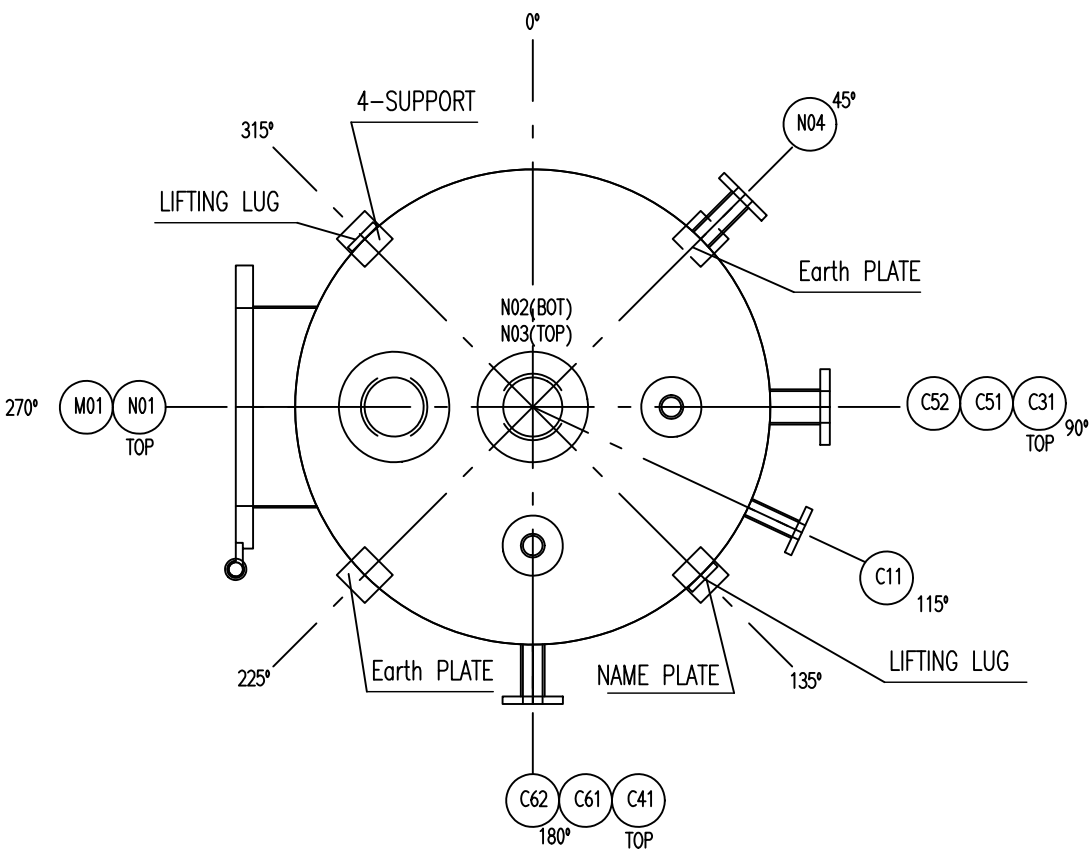
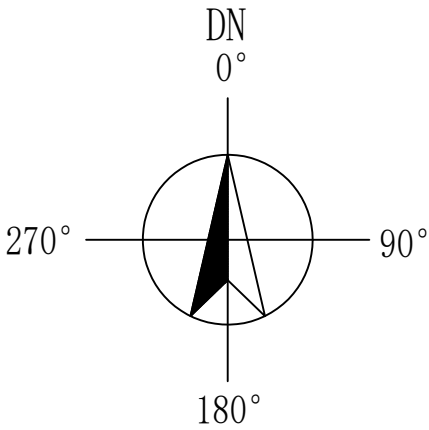




NOTE: I1~8, O1~8 nozzle orientation as per GENERAL ASSEMBLY DWG.

	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI SIGNATURE	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation V-2202		Neopentyl Glycol Plant				
	HYDROGENATION RAW MATERIAL TANK		DETAIL DESIGN				
			21150-18000-PP60-25				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION

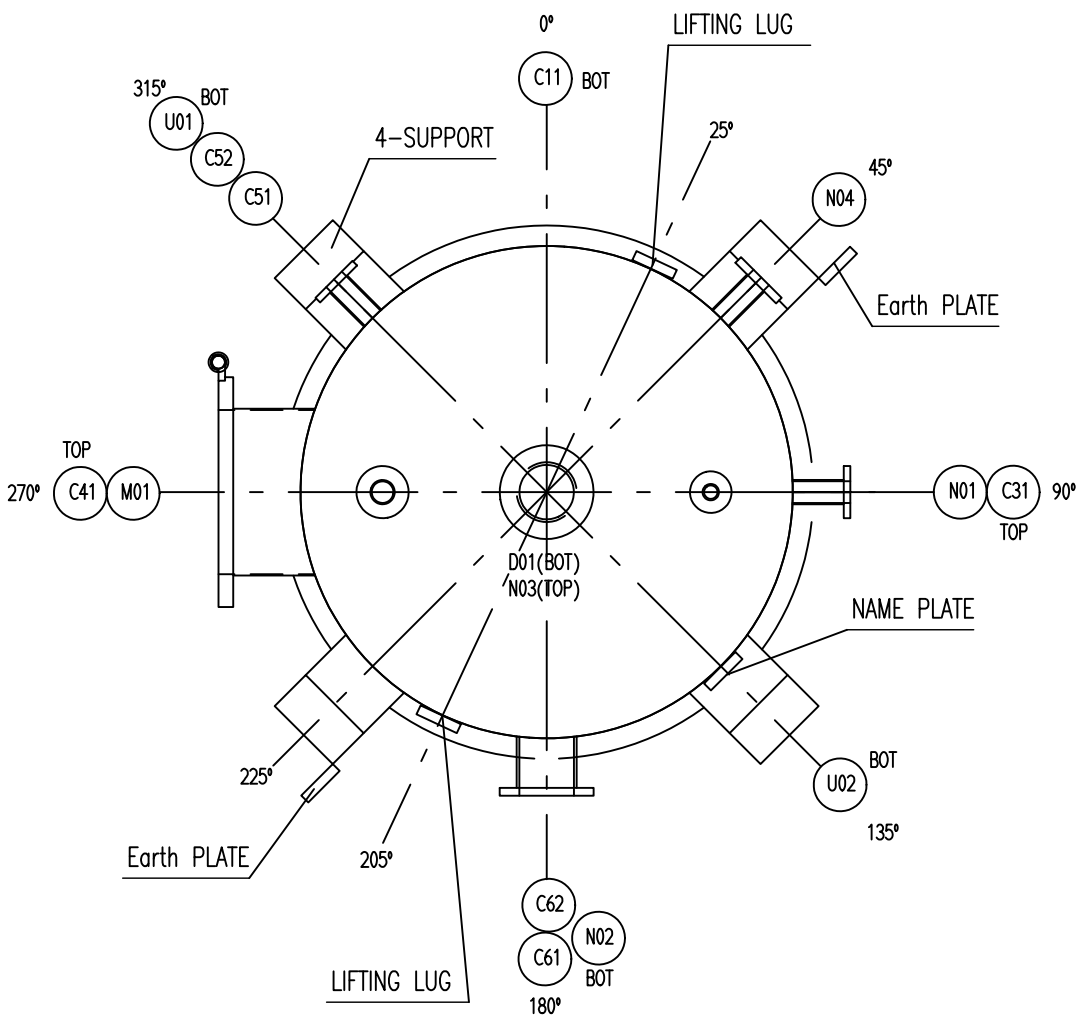
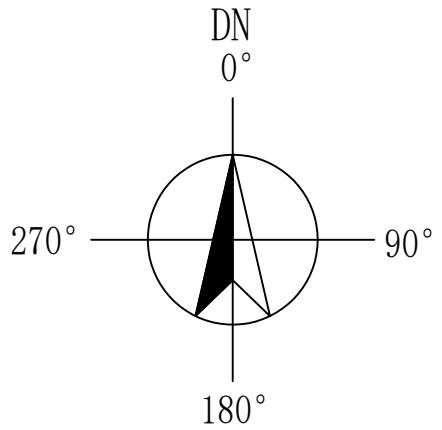
M01





D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div> <div>Nozzle Orientation V-2401 LIGHT COMPONENT TOWER REFLUX TANK</div>			<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-26			
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION

M01

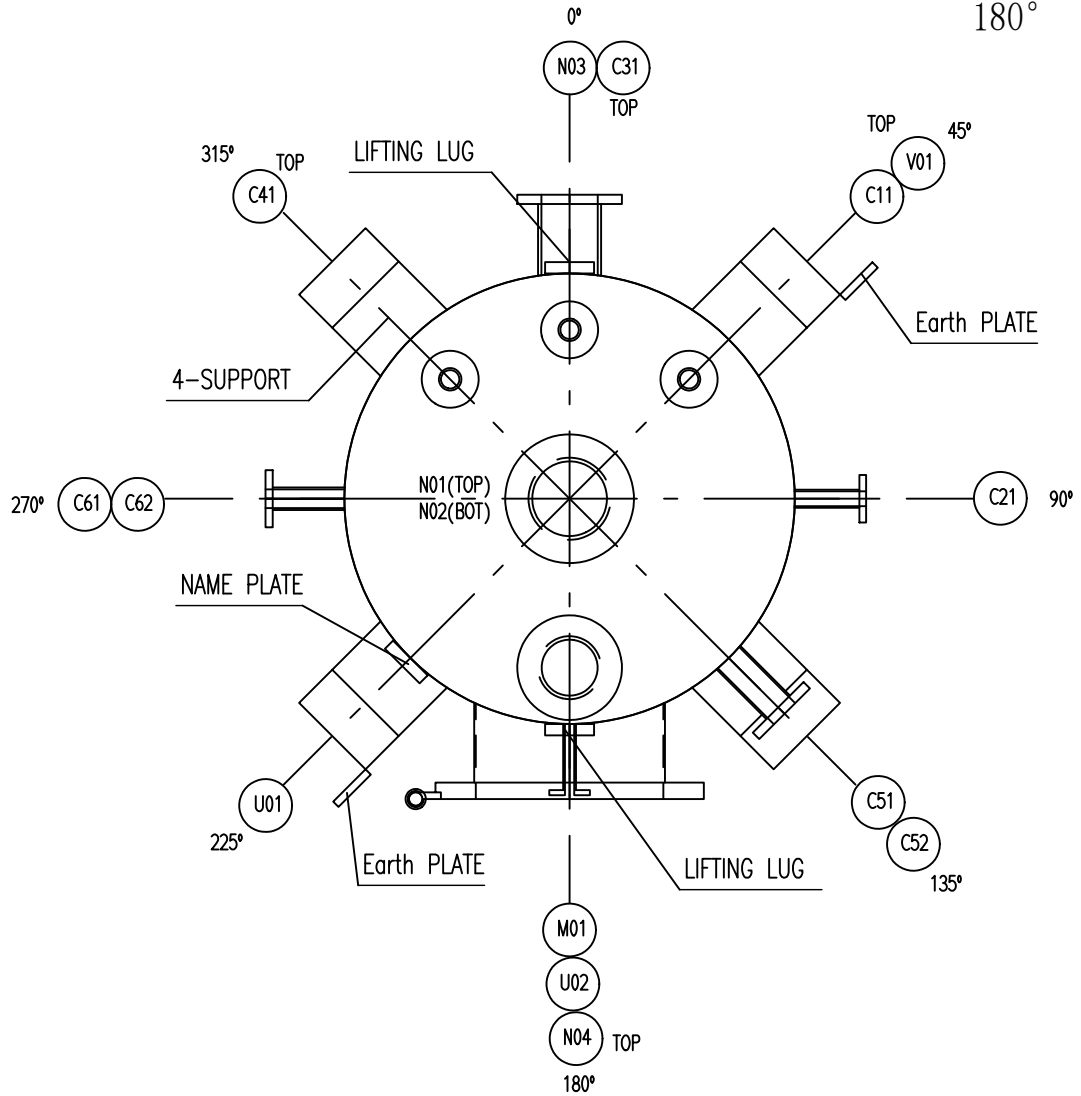
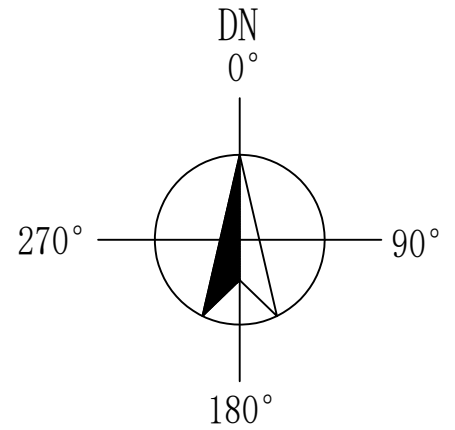




NOTE: I1~8, 01-8 nozzle orientation as per GENERAL ASSEMBLY DWG.

	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation V-2403 NPG TOWER REFLUX TANK		Neopentyl Glycol Plant				
			DETAIL DESIGN				
			21150-18000-PP60-27				D00 REV.
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

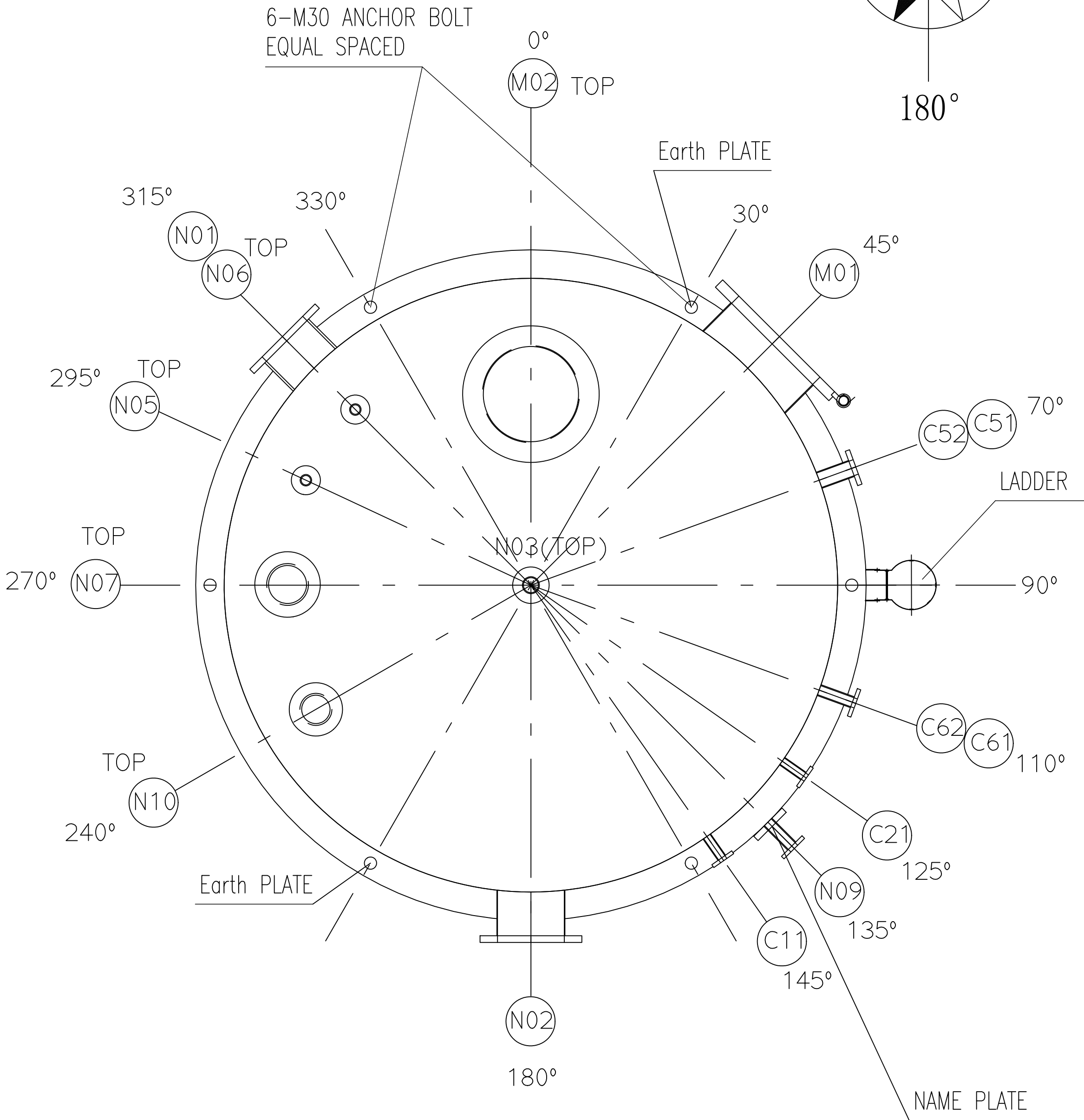
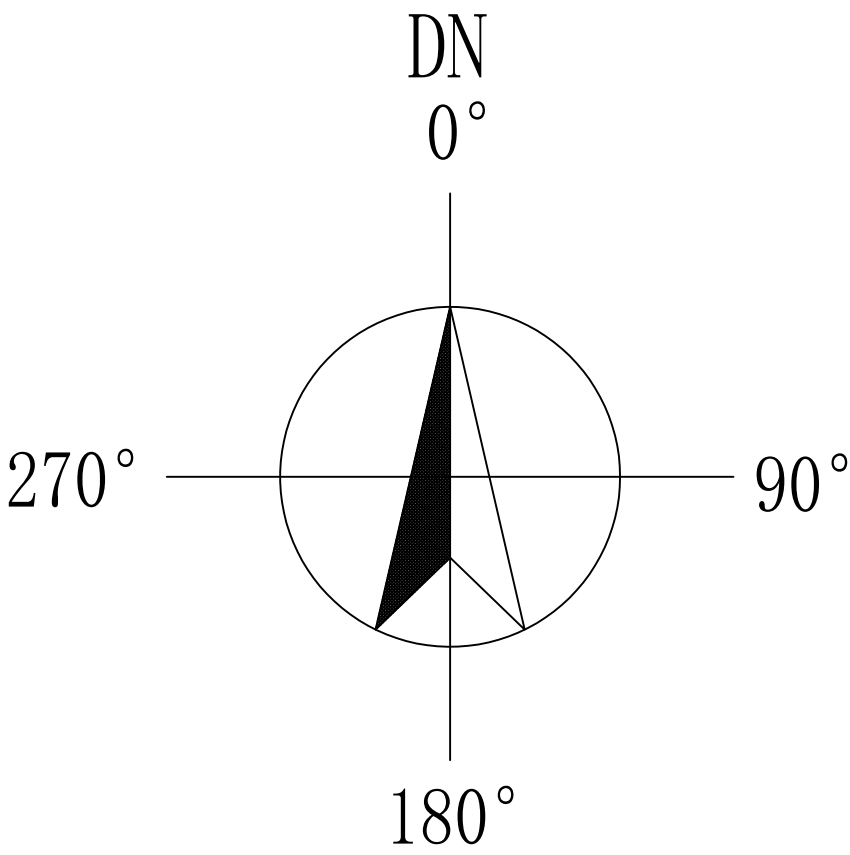
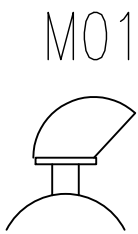
OPENING DIRECTION

M01





D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10		
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE		
<div> WUHUAN ENGINEERING CO., LTD.</div> <div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div>				<div> PT PETRO OXO NUSANTARA</div> <div>30,000 TPA NEOPENTYL GLYCOL PALNT</div>						
				Neopentyl Glycol Plant						
				DETAIL DESIGN						
				21150-18000-PP60-28					D00	REV.
				SCALE					-	SHT.
SPECI	PIPING	AREA	18000							

OPENING DIRECTION

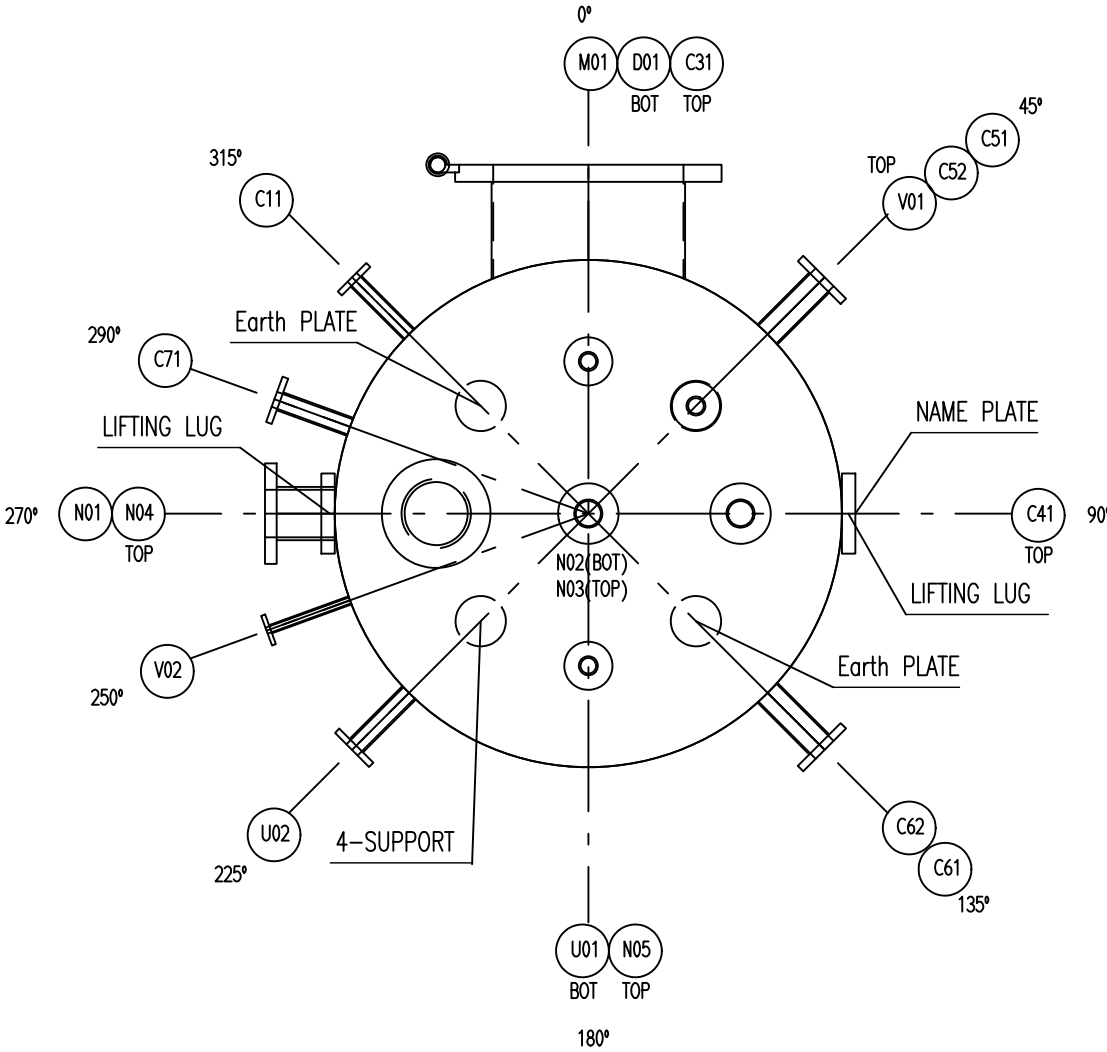
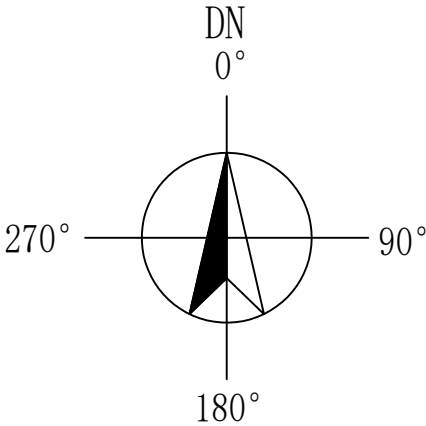


A4 297×210

D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10			
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD	DATE		
<div>WUHUAN ENGINEERING CO., LTD.</div> <div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div>			<div>PT PETRO OXO NUSANTARA</div> <div>30,000 TPA NEOPENTYL GLYCOL PALNT</div>						
			Neopentyl Glycol Plant						
			DETAIL DESIGN						
			21150-18000-PP60-29				D00	REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1	OF	1

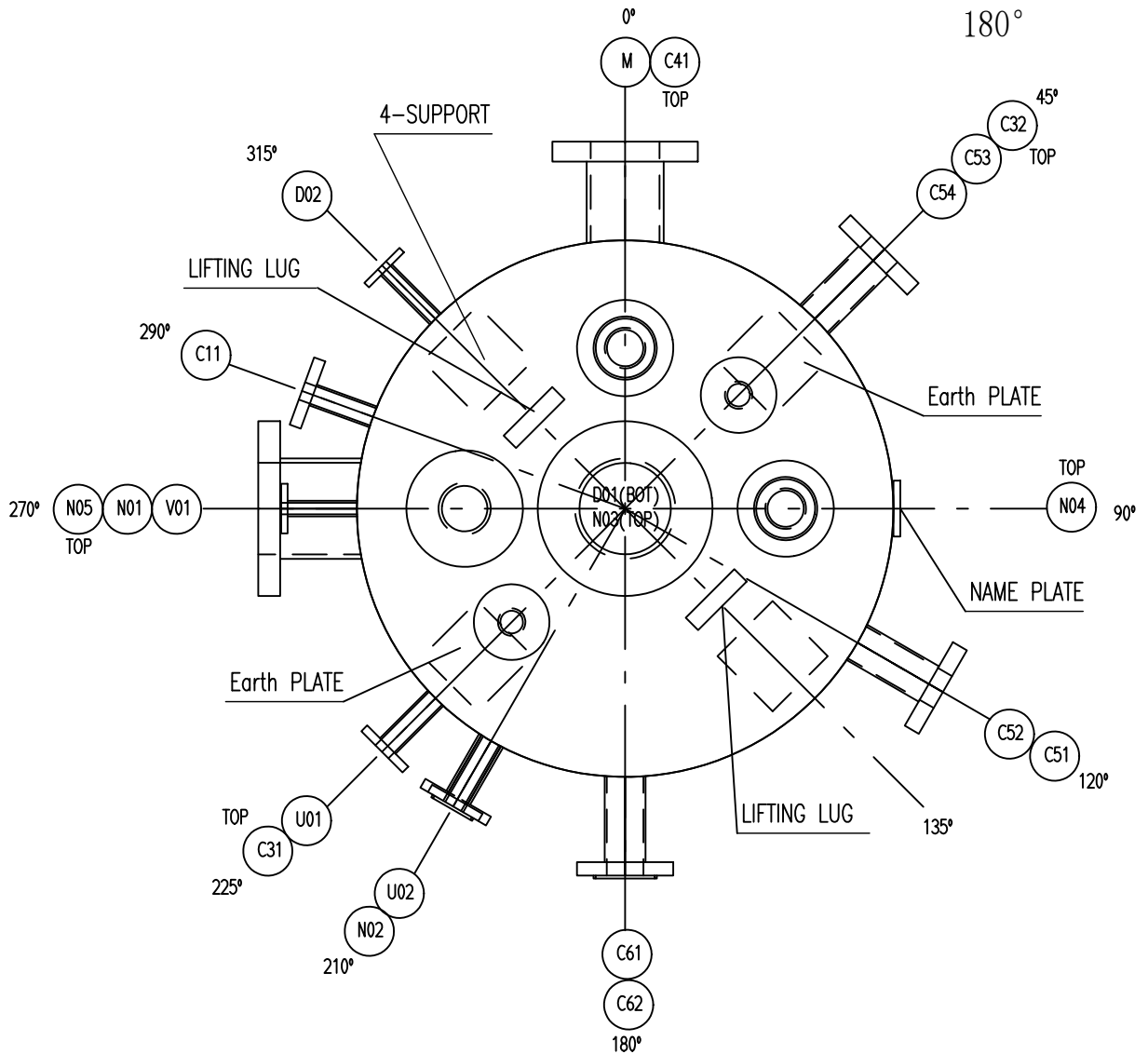
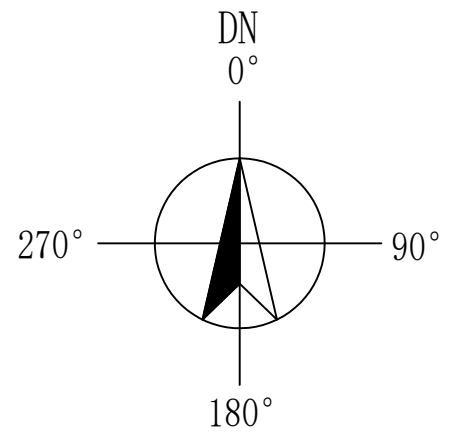
OPENING DIRECTION

M01





NOTE: 11~9, 01~9 nozzle orientation as per GENERAL ASSEMBLY DWG.

	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI SIGNATURE	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT Neopentyl Glycol Plant DETAIL DESIGN 21150-18000-PP60-30 D00 REV.				
	Nozzle Orientation V-2502 NPG AQUEOUS SOLUTION PREPARATION TANK						
	SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

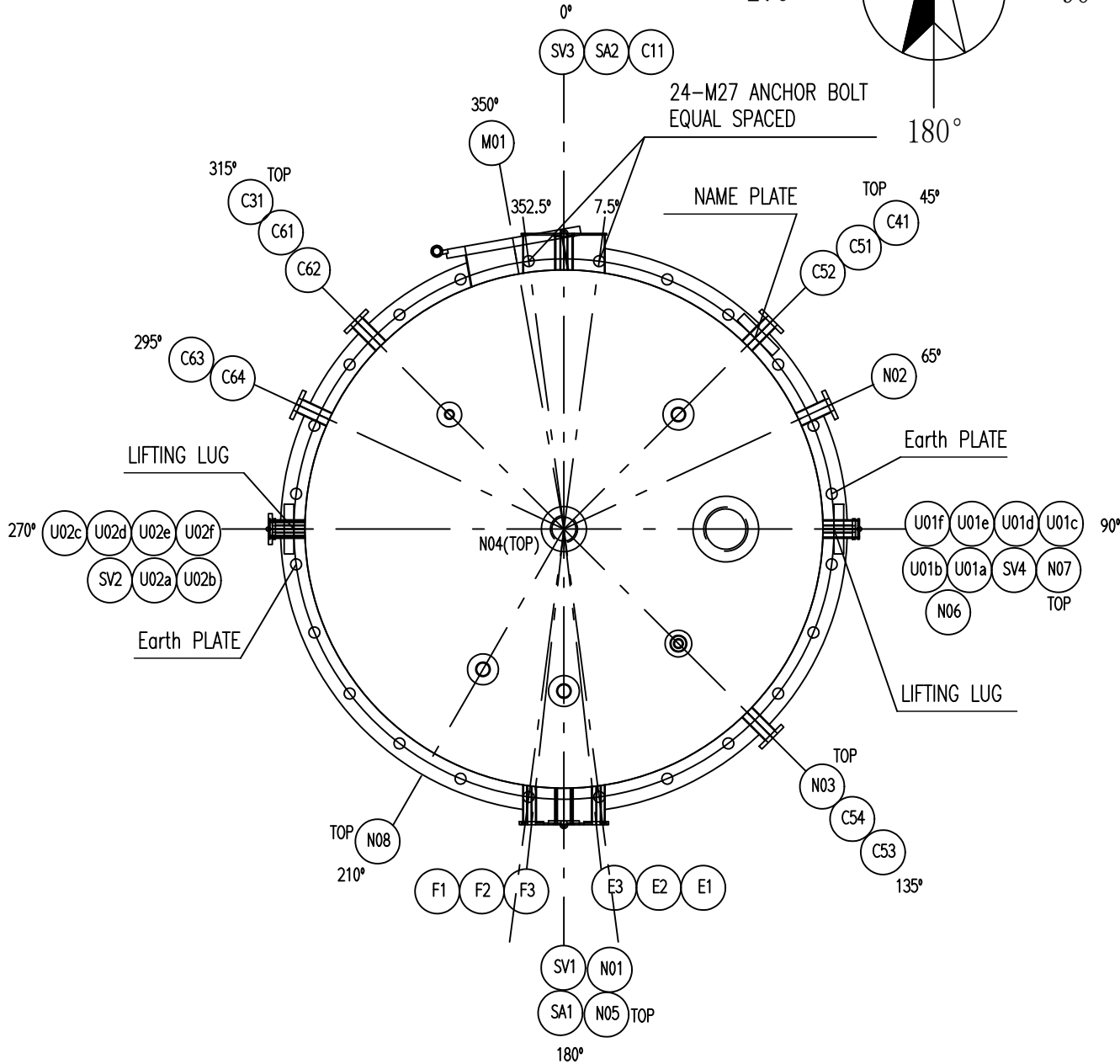
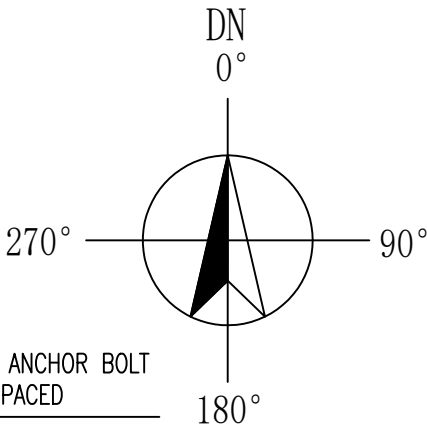


NOTE: I1~5, O1~5 nozzle orientation as per GENERAL ASSEMBLY DWG.



D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
Nozzle Orientation V-2301 PRESSURE BUFFERING TANK		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-31				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1 OF 1

OPENING DIRECTION

M01



NOTE: I1~11, O1~10 nozzle orientation as per GENERAL ASSEMBLY DWG.

	D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
	REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD	DATE
SPECI SIGNATURE	 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT				
	Nozzle Orientation V-2302		Neopentyl Glycol Plant				
	HYDROGENATION LIQUID INTERMEDIATE TANK		DETAIL DESIGN				
			21150-18000-PP60-32				D00 REV.
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1	OF 1

A

A

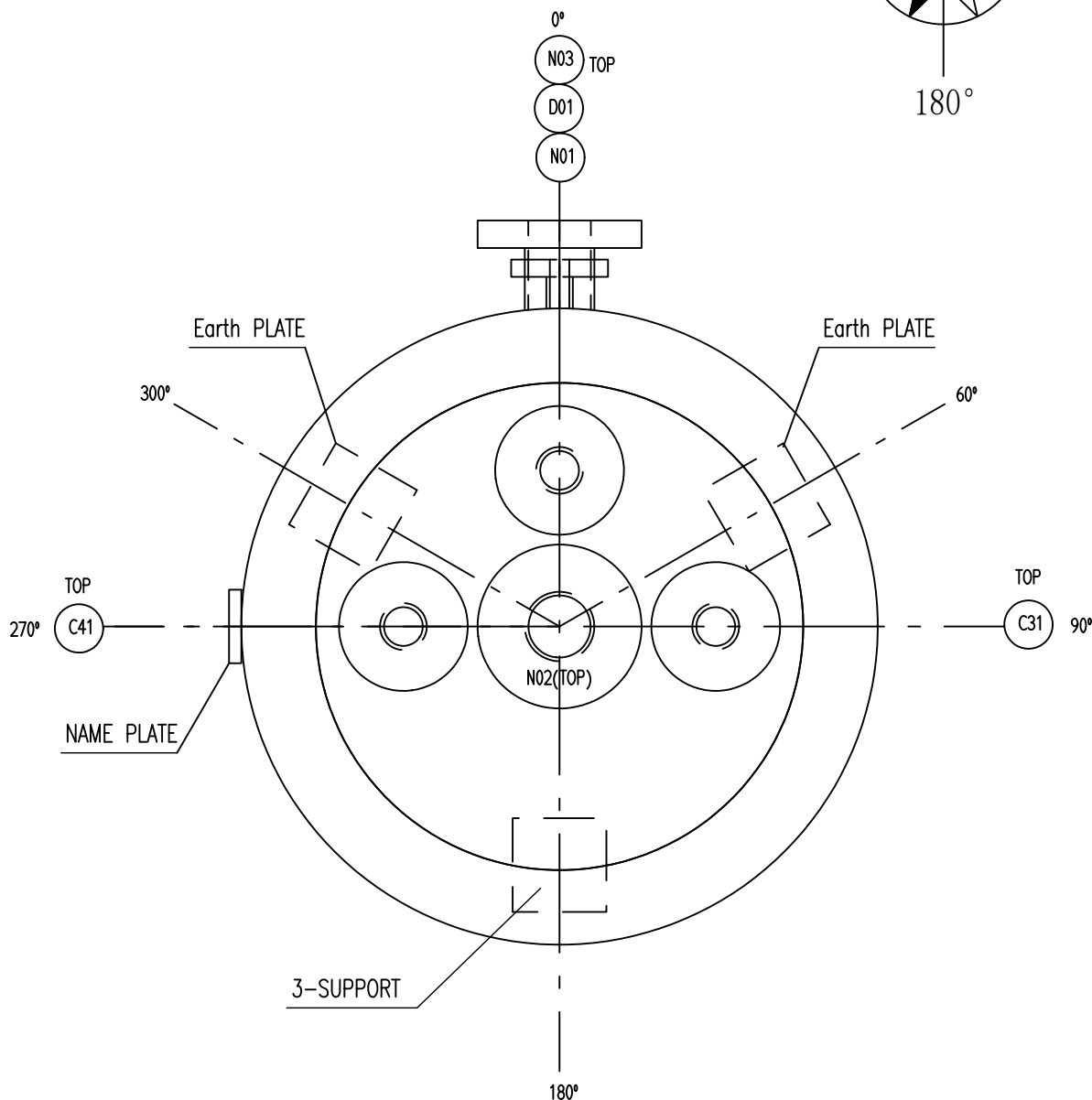
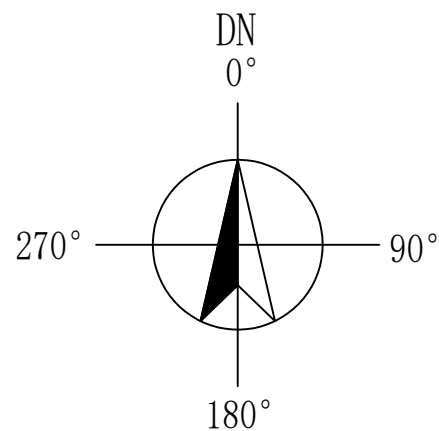
B



B

C

C

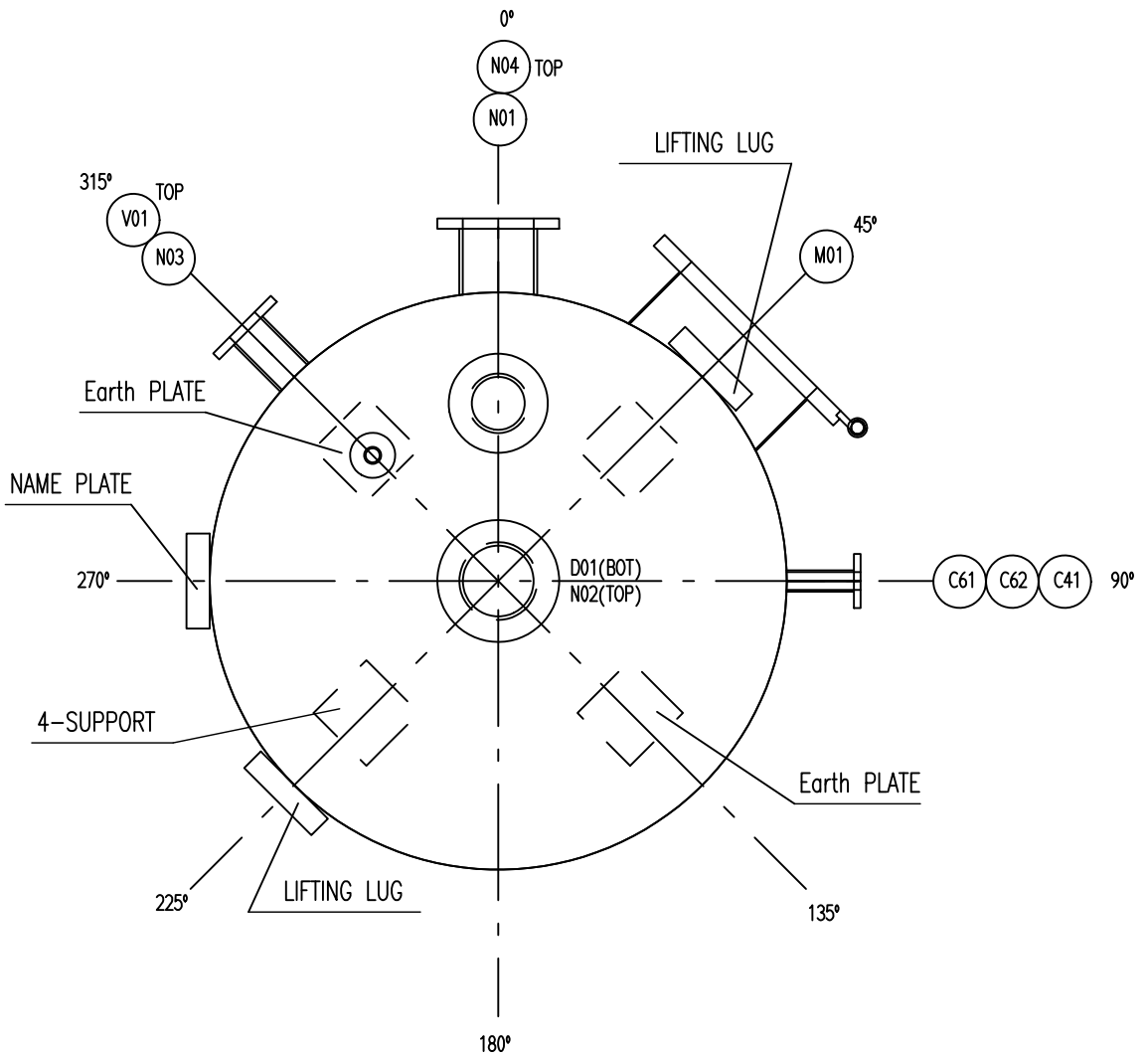
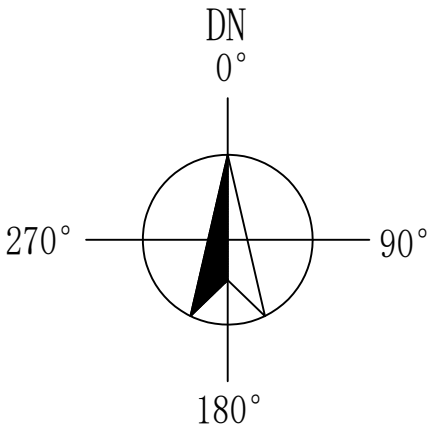
A4 297×210





D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
Nozzle Orientation V-2303 HYDROGEN BUFFER TANK		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-33				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1	OF 1

OPENING DIRECTION

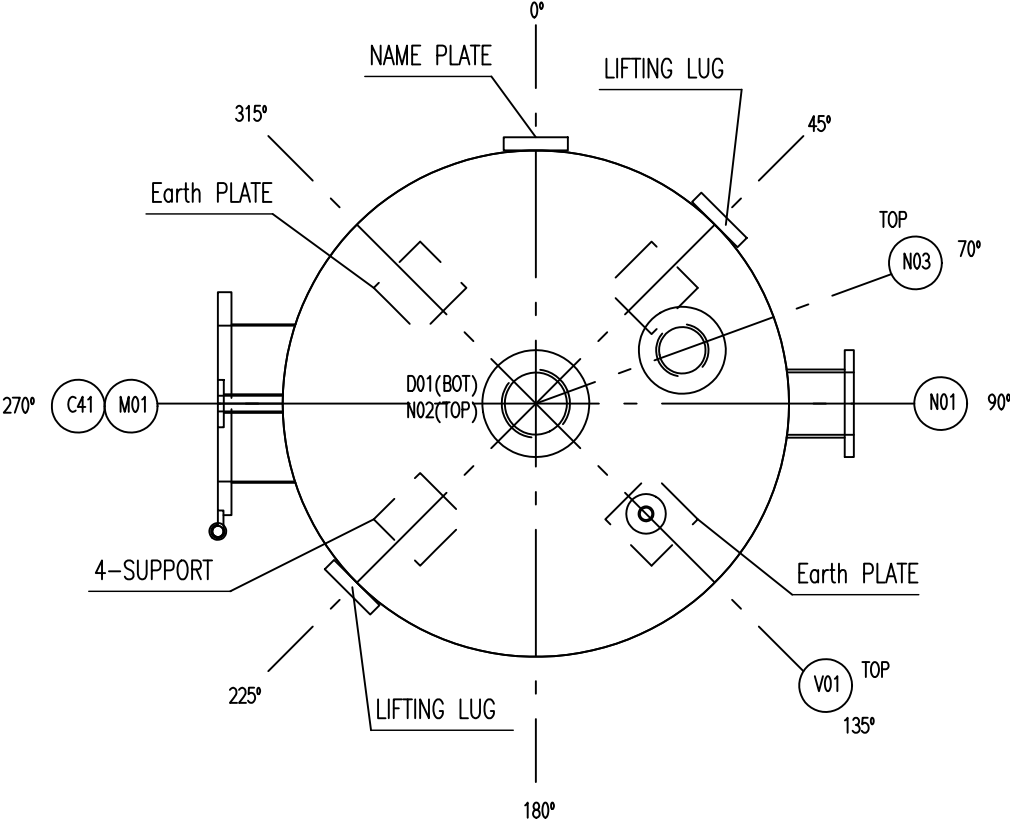
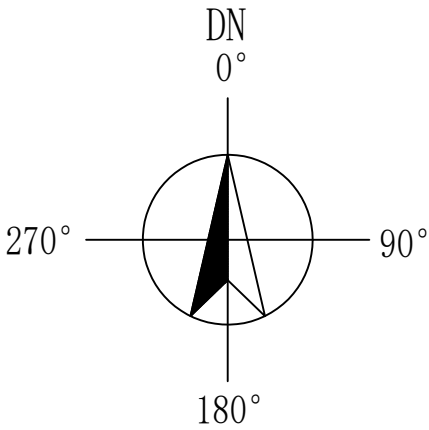
M01





D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
Nozzle Orientation V-2304 CIRCULATING COMPRESSOER INLET BUFFER TANK		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-34				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1 OF 1

OPENING DIRECTION

M01



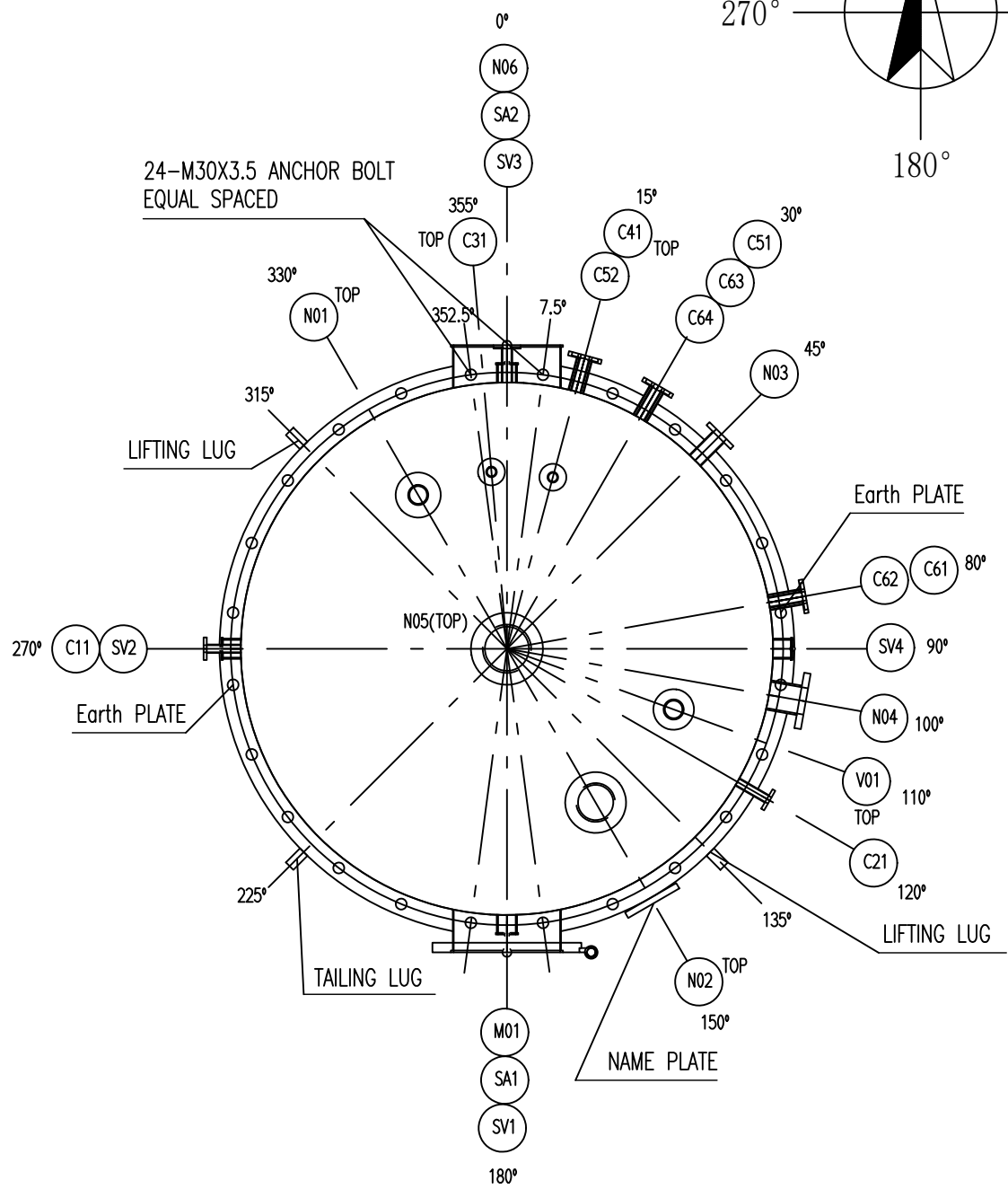
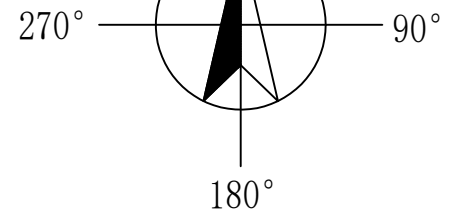
D00	For Construction		Xiang Guojun	Zheng Kai	Pan Feng	2025.9.10
REV.	DESCRIPTION		DEGND	CHEKD	APPRD	AUTHD DATE
<div>WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small></div> <div>Nozzle Orientation V-2305 CIRCULATING COMPRESSOR OUTLET BUFFER TANK</div>			<div>PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT</div>			
			Neopentyl Glycol Plant			
			DETAIL DESIGN			
			21150-18000-PP60-35			
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1 OF 1

OPENING DIRECTION

M01



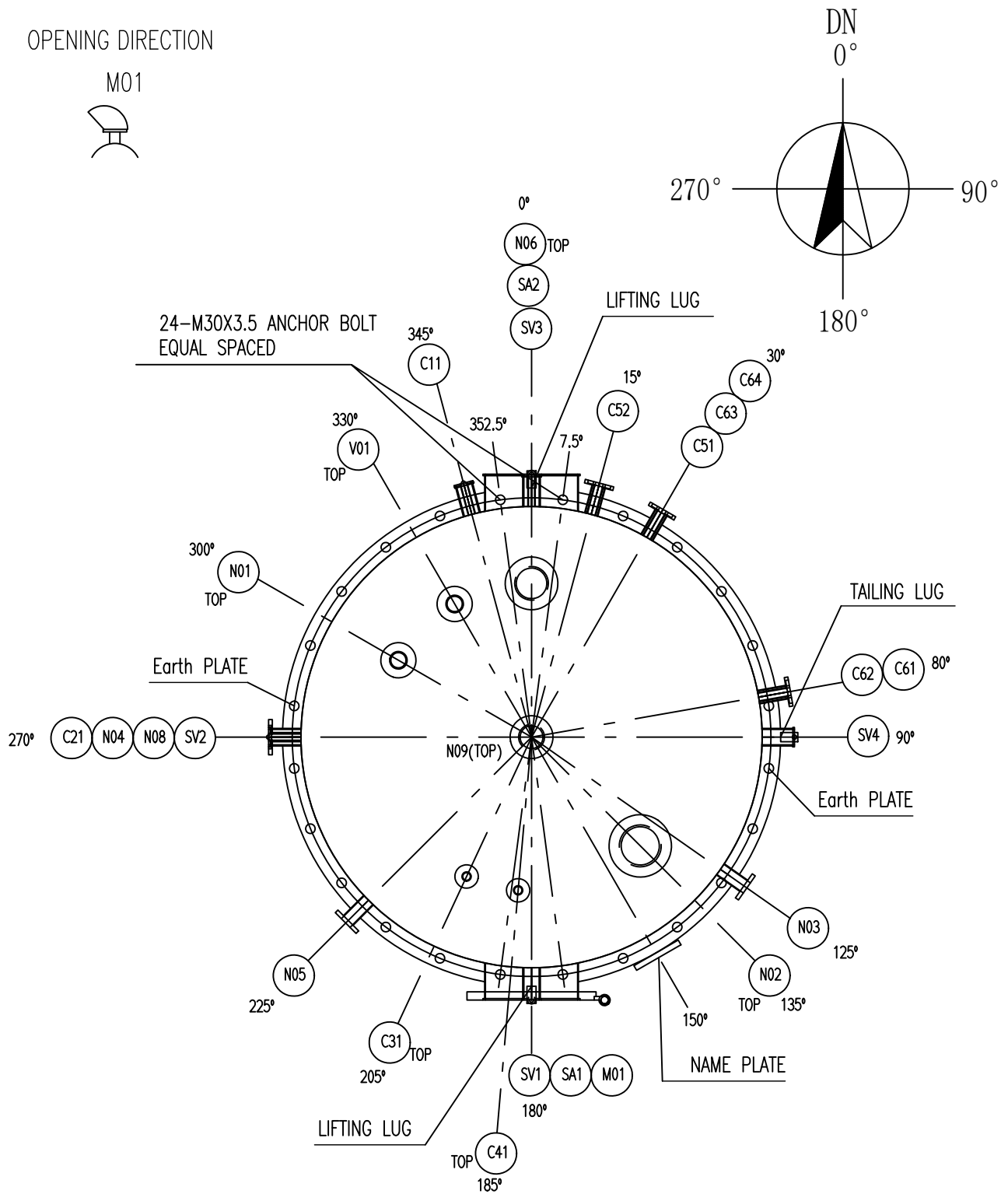
DN
0°



D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-36				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT.	1 OF 1

OPENING DIRECTION

M01



D00

For Construction

Xiang Guojun

Zheng Kai

Pan Feng

2025.9.10

REV.

DESCRIPTION

DEGND

CHEKD

APPRD

AUTHD

DATE



WUHUAN ENGINEERING CO., LTD.

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PT PETRO OXO NUSANTARA

30,000 TPA NEOPENTYL GLYCOL PALNT

Neopentyl Glycol Plant

DETAIL DESIGN

Nozzle Orientation

V-2602

0.2MPAG STEAM BALANCE TANK

21150-18000-PP60-37

D00 REV.

SPECI

PIPING

AREA

18000

SCALE

-

SHT.

1

OF

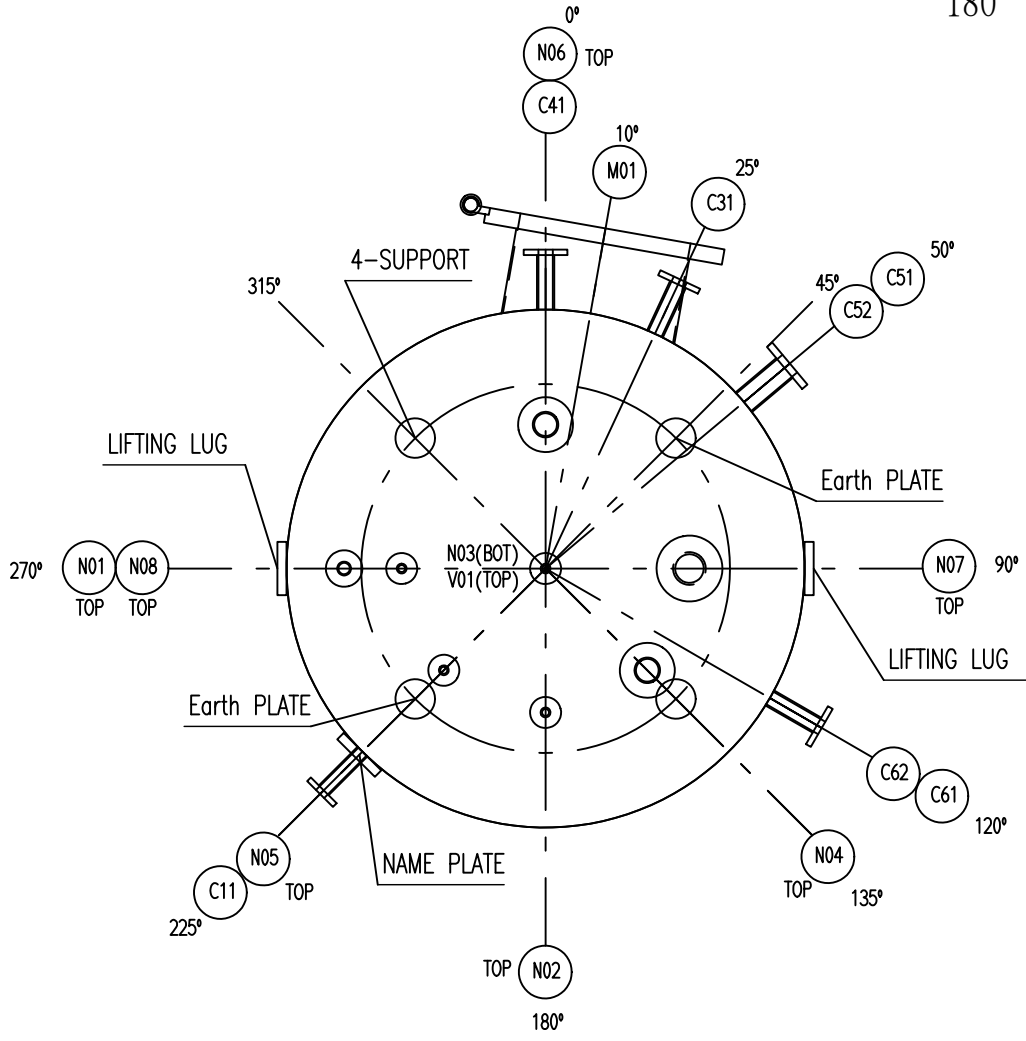
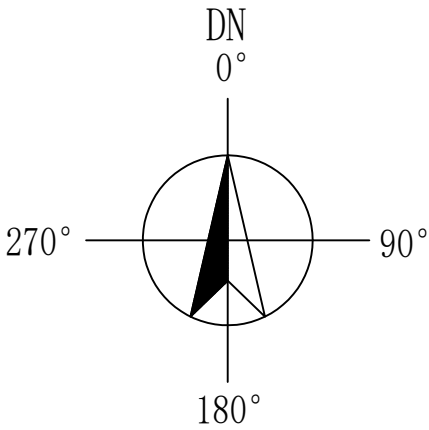
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SPECI

SIGNATURE

OPENING DIRECTION

M01



D00	For Construction	Xiang Guojun	Zheng Kai	Pan Feng			2025.9.10
REV.	DESCRIPTION	DEGND	CHEKD	APPRD	AUTHD		DATE
 WUHUAN ENGINEERING CO., LTD. <small>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</small>		 PT PETRO OXO NUSANTARA 30,000 TPA NEOPENTYL GLYCOL PALNT					
Nozzle Orientation V-2402 VACUUM CONDENSATE BUFFER TANK		Neopentyl Glycol Plant					
		DETAIL DESIGN					
		21150-18000-PP60-38				D00 REV.	
SPECI	PIPING	AREA	18000	SCALE	-	SHT. 1	OF 1

90° 180°

0°
N03 TOP

TOP 20°
N01

320° TOP
C41

315°
M01

305°

N04

SV4 N05

Earth PLATE

 240°

2

 225° 240° 225°

C64

C63

SV3

 180°

195°

0°
N03 TOP

TOP 20°
N01

 45°

SA1

Earth PLATE

Diagram showing four overlapping circles labeled U01c, U01b, U01a, and SV2.



U01g U01f U01e U01d

LIFTING LUG

90°

1

 115°



TOP

 130°

52

135°

NAME PLATE

D00	For Construction			Xiang Guojun	Zheng Kai	Pan Feng		2025.9.10
REV.	DESCRIPTION			DEGND	CHEKD	APPRD	AUTHD	DATE
<div><div>WUHUAN ENGINEERING CO., LTD.</div><div>MUST NOT BE COPIED, TRANSMITTED TO OTHERS OR USED WITHOUT PERMISSION OF WUHUAN ENGINEERING CO., LTD.</div></div>				<div><div>PT PETRO OXO NUSANTARA</div><div>30,000 TPA NEOPENTYL GLYCOL PALNT</div></div>				
Nozzle Orientation V-2101 TRIMETHYLAMINE TANK				Neopentyl Glycol Plant				
				DETAIL DESIGN				
				21150-18000-PP60-39				D00
SPECI	PIPING	AREA	18000	SCALE	-		SHT.	1 OF 1